FAIRBANKS'

STANDARD

WEIGHING MACHINES.

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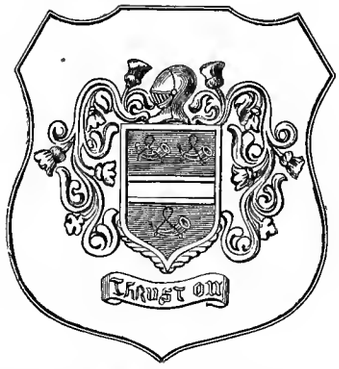

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FAIRBANKS'

STANDARD WEIGHING MACHINES.

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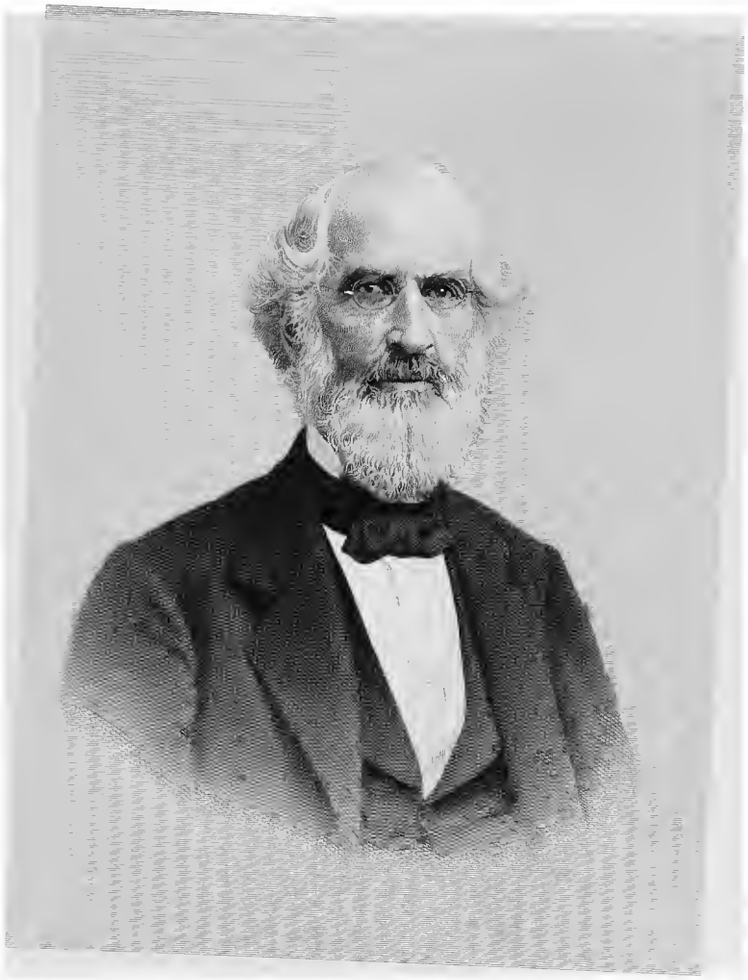

Thaddeus Fairbanks

FAIRBANKS'

STANDARD WEIGHING MACHINES.

MANUFACTURERS:

E. & T. FAIRBANKS & CO.,

ST. JOHNSBURY, VERMONT,

U. S. A.

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INDEX.

	Page.
All of Metal	34, 35
All of Metal	76, 77
All of Metal, Extra Heavy, No. 6	38, 39
All of Metal, with Bag Rack	58, 59
Army and Navy	72, 73
Block Weights	198, 199
Boston Market	190, 191
Bullock or Stock	144, 145
Butchers'	96, 97
Butchers' Trip	114, 115
Butter Trip, with Side Beam	112, 113
Cement Tester	214, 215
Cheese Factory	64, 65, 66, 67
Cloth Beam	186, 187
Cloth Sample Balance	188, 189
Coal Dealers' or Cart	134, 135
Coin Detector	200, 201
Compound Beam	156, 157
Commissary or Pursers'	70, 71
Cotton Beam	154, 155
Counter	98, 99
Depot	146, 147
Dormant Cloth	46, 47
Dormant Cotton	48, 49
Dormant Warehouse, Single Pillar	50, 51
Dormant Warehouse, with Iron Pillars	42, 43, 44, 45
Druggists'	100, 101
Druggists' Even Balance	116, 117
Even Balance	118, 119
Even Balance, with Side Beam	120, 121
Even Balance Trip	104, 105
Even Balance Trip, with Funnel Scoop	110, 111
Even Balance Trip, with Two Plates	108, 109
Even Balance Trip, Side Beam	106, 107
Even Beam	158, 159
Flour Dormant	56, 57
Flour Packing	54, 55
Folding Coffee Bottom	166, 167
Grain Tester	204 to 213
Grocers'	92, 93, 94, 95

INDEX.

[CONTINUED.]

	PAGE.
Hay and Wagon	132, 133
Hooks	176 to 183
Large Hopper	62, 63
Letter Balances	122, 123, 124, 125
Millers' and Grain Dealers'	52, 53
Miners'	136, 137
No. 12, All Metal	82, 83
Paper Beam	184, 185
Pig Iron Cradle	164, 165
Plain Coffee Bottom	168, 169
Plantation Railroad	142, 143
Platform Counter, No. 12	84, 85
Portable Cart	130, 131
Portable, with Drop Lever	24, 25
Portable, Extra Heavy	26, 27
Portable Freight	74, 75
Portable Hopper	60, 61
Portable Warehouse	40, 41
Portable, with Wheels	22, 23
Portable, without Wheels	20, 21
Railroad Track	148, 149
Rolling Mill	30, 31
Rolling Mill, Extra Heavy	32, 33
Round Bottom	174, 175
Salt Meat and Fish	68, 69
Southern Cotton Beam	162, 163
Square Bottom	172, 173
Standing Bottom	170, 171
Standard Measures	194, 195
Standard Weights	126, 127
Stock	138, 139
Stock Charging	128, 129
Sugar Cane	140, 141
Tea and Spices	102, 103
Testing Machines	216 to 219
Town Sealers'	202, 203
Union or Family	86, 87, 88, 89, 90, 91
Vibratory or Swivel Axle	28, 29
Weigh Lock	150, 151
Weighing and Measuring, Extra Finish	78, 79

INDEX.

[CONTINUED.]

	Page.
Weighmasters' Beams	152, 153
Weighmasters' Frames	160, 161
Wheelbarrow	36, 37
Wool	80, 81
Yard Measure	196, 197
Yarn Numbering Beam	192, 193

Leading Manufacturers of the United States.

	Page.
Agricultural Implements	258
Axes	242
Bells	253
Bookbinders' Machinery	239
Carriage Wheels	249
Clocks	236
Clothes Wringers	255
Copying Presses	237
Cutlery	241
Fire Arms	260
Hand Pumps	246
Padlocks	257
Presses	256
Rock Drill	243
Rubber Belting and Packing	264
Saddlers' Tools	240
Safes	244
Sewing Machines	260
Shade Rollers	235
Shovels	250, 251, 252
Silver Plated Goods	263
Spring Balances	245
Steam Pumps	247
Stoves and Iron Works	238
Varnishes	248
Watches	262
Wind Mills	259
Wire Goods	254
Writing Machines	261

INDEX.

[CONTINUED.]

	PAGE.
Hay and Wagon	132, 133
Hooks	176 to 183
Large Hopper	62, 63
Letter Balances	122, 123, 124, 125
Millers' and Grain Dealers'	52, 53
Miners'	136, 137
No. 12, All Metal	82, 83
Paper Beam	184, 185
Pig Iron Cradle	164, 165
Plain Coffee Bottom	168, 169
Plantation Railroad	142, 143
Platform Counter, No. 12	84, 85
Portable Cart	130, 131
Portable, with Drop Lever	24, 25
Portable, Extra Heavy	26, 27
Portable Freight	74, 75
Portable Hopper	60, 61
Portable Warehouse	40, 41
Portable, with Wheels	22, 23
Portable, without Wheels	20, 21
Railroad Track	148, 149
Rolling Mill	30, 31
Rolling Mill, Extra Heavy	32, 33
Round Bottom	174, 175
Salt Meat and Fish	68, 69
Southern Cotton Beam	162, 163
Square Bottom	172, 173
Standing Bottom	170, 171
Standard Measures	194, 195
Standard Weights	126, 127
Stock	138, 139
Stock Charging	128, 129
Sugar Cane	140, 141
Tea and Spices	102, 103
Testing Machines	216 to 219
Town Sealers'	202, 203
Union or Family	86, 87, 88, 89, 90, 91
Vibratory or Swivel Axle	28, 29
Weigh Lock	150, 151
Weighing and Measuring, Extra Finish	78, 79

INDEX.

[CONTINUED.]

	Page.
Weighmasters' Beams	152, 153
Weighmasters' Frames	160, 161
Wheelbarrow	36, 37
Wool	80, 81
Yard Measure	196, 197
Yarn Numbering Beam	192, 193

LEADING MANUFACTURERS OF THE UNITED STATES.

	Page.
Agricultural Implements	258
Axes	242
Bells	253
Bookbinders' Machinery	239
Carriage Wheels	249
Clocks	236
Clothes Wringers	255
Copying Presses	237
Cutlery	241
Fire Arms	260
Hand Pumps	246
Padlocks	257
Presses	256
Rock Drill	243
Rubber Belting and Packing	264
Saddlers' Tools	240
Safes	244
Sewing Machines	260
Shade Rollers	235
Shovels	250, 251, 252
Silver Plated Goods	263
Spring Balances	245
Steam Pumps	247
Stoves and Iron Works	238
Varnishes	248
Watches	262
Wind Mills	259
Wire Goods	254
Writing Machines	261

Principal Warehouses.

FAIRBANKS & CO., New York.
FAIRBANKS & CO., Philadelphia, Pa.
FAIRBANKS & CO., Baltimore, Md.
FAIRBANKS & CO., New Orleans, La.
FAIRBANKS & CO., Buffalo, N. Y.
FAIRBANKS & CO., Pittsburgh, Pa.
FAIRBANKS & CO., Albany, N. Y.
FAIRBANKS & CO., Montreal.
FAIRBANKS & CO., St. Louis, Mo.
FAIRBANKS & CO., Denver, Colorado.
FAIRBANKS & CO., Indianapolis, Ind.
FAIRBANKS & CO., London, England.
FAIRBANKS & CO., Moscow, Russia, } J. Block, Representative.
FAIRBANKS & CO., St. Petersburg, Russia, } J. Block, Representative.
FAIRBANKS, BROWN & CO., Boston, Mass.
FAIRBANKS, MORSE & CO., Chicago, Ill.
FAIRBANKS, MORSE & CO., Cincinnati, Ohio.
FAIRBANKS, MORSE & CO., Cleveland, Ohio.
FAIRBANKS, MORSE & CO., Louisville, Ky.
FAIRBANKS, MORSE & CO., St. Paul, Minn.
FAIRBANKS & HUTCHINSON, San Francisco, Cal.

To the Public.

WITH the exception of the Locomotive and the Telegraph, no modern improvement or invention for facilitating and expediting the transaction of business, has wrought such important changes as the Platform Balance.

Previous to the year 1830, Platform Weighing Machines, although not entirely unknown, were very little used. Transactions by weight were confined, essentially, to the use of the Even Balance, the Dearborn Beam, and the Roman Steelyards.

The introduction of Platform Weighing Machines has wrought a revolution in almost every department of business where measurement of quantities is required, whether relating to the sale or exchange of commodities, or the transportation of heavy bodies, so that this instrument, of comparatively recent invention, is absolutely indispensable in the commercial and business transactions of the country.

The invention of these Weighing Machines, and the improvements that have from time to time been adopted, are the result of nearly a half a century of close observation and practical experience; and we have now brought them to such a degree of accuracy that they may safely be relied upon in every transaction of weight. Their construction is upon the most correct mathematical principles; all defects so commonly met with in Compound Balances have been overcome by practical skill and faithful workmanship, and hence their operation is delicate, and in every case unerringly correct.

The reputation which these Weighing Machines have acquired has been of steady growth from the commencement to the present time, and is based upon the principles adopted by us, and never deviated from, of allowing none but perfect Weighing Machines to go forth from our establishment.

By a strict adherence to this principle, the confidence of the public in the accuracy of these Weighing Machines has steadily increased, and with it the demand.

We have received the highest awards at International Expositions, from various Scientific Associations, from State and County Agricultural Societies, &c., &c. But the most satisfactory testimonials which we have received are from the thousands of business men—including Managers of Railroads, the Officers of Government and other Public Works, Merchants, Manufacturers, the Forwarders of Merchandise, and others who have for nearly Fifty years subjected these Weighing Machines daily to severe usage and the most rigorous tests.

Nearly all the Railroads in the United States are supplied with Weighing Machines of our manufacture.

From over Eight hundred different modifications of our Weighing Machines, we have selected the following illustrations of a few of the leading sizes and kinds, which will serve to show that they are adapted to the requirements of every branch of business.

E. & T. FAIRBANKS & CO.

Important Facts.

THESE Weighing Machines are manufactured only by the Original Inventors, and all others represented as Fairbanks' are mere imitations, of which purchasers should beware.

☞ They are extremely simple in construction, are made of the very best materials by experienced and intelligent workmen, and under the strictest supervision of the inventors.

☞ They have been in constant use in all branches of business, in all parts of the world, for nearly Fifty years, and, having been most thoroughly tried, are the acknowledged standard.

☞ They have taken more First Premiums than all other Weighing Machines, and, what is of more practical value, have received the award of Superior Excellence by the vast numbers who have used them for many years.

☞ They are fully warranted not only strong and accurate, but durable; and the manufacturers, who are permanently established and fully responsible, will always be prompt to make this warranty good.

☞ They are, owing to the large experience and superior facilities of the manufacturers, offered at lower prices than other Weighing Machines of equal size and strength.

☞ They are made of all sizes and capacities, and adapted to all required uses, embracing more than Eight hundred different modifications.

☞ They are cheap, convenient, strong, accurate and durable, their superiority in these respects having been proven by long use, and no pains will be spared to maintain and, if possible, improve their quality.

☞It is a significant fact, which the public will appreciate, that whenever new Weighing Machines are put upon the market, as large numbers have been from time to time during the last thirty years, it seems to be the first and chief aim of the makers to show that they are the "same as Fairbanks'," or like them, or are improvements upon them, or have taken the premiums over them, thus recognizing the latter as the Standard for Excellence, and showing the strong hold they have upon the public confidence.

☞A lawsuit which arose from a discrepancy of weights between one of Fairbanks' Weighing Machines, in use by the Baltimore and Ohio Railroad Company, and one of another manufacturer, was tried in the Court of Common Pleas, Baltimore. The case occupied the Court two days, and Judge MARSHALL, in delivering his decision, stated, as the result of the evidence, that the accuracy of "Fairbanks' Weighing Machines" was established beyond all question.

Special Notice.

WE are prepared to furnish these Weighing Machines, adjusted to the standard of all nations, English, French, Spanish, Portuguese, German, Dutch, Russian, Turkish, Chinese, &c., &c.

The prices herein quoted include packing, and our Machines being all made to standard gauges, any part can at all times be duplicated.

When parts of Weighing Machines are ordered the shop number of the Weighing Machine, which may be found upon the end of the wood cap over the beam, should always be referred to.

Agents in ordering will please copy full description from Price List.

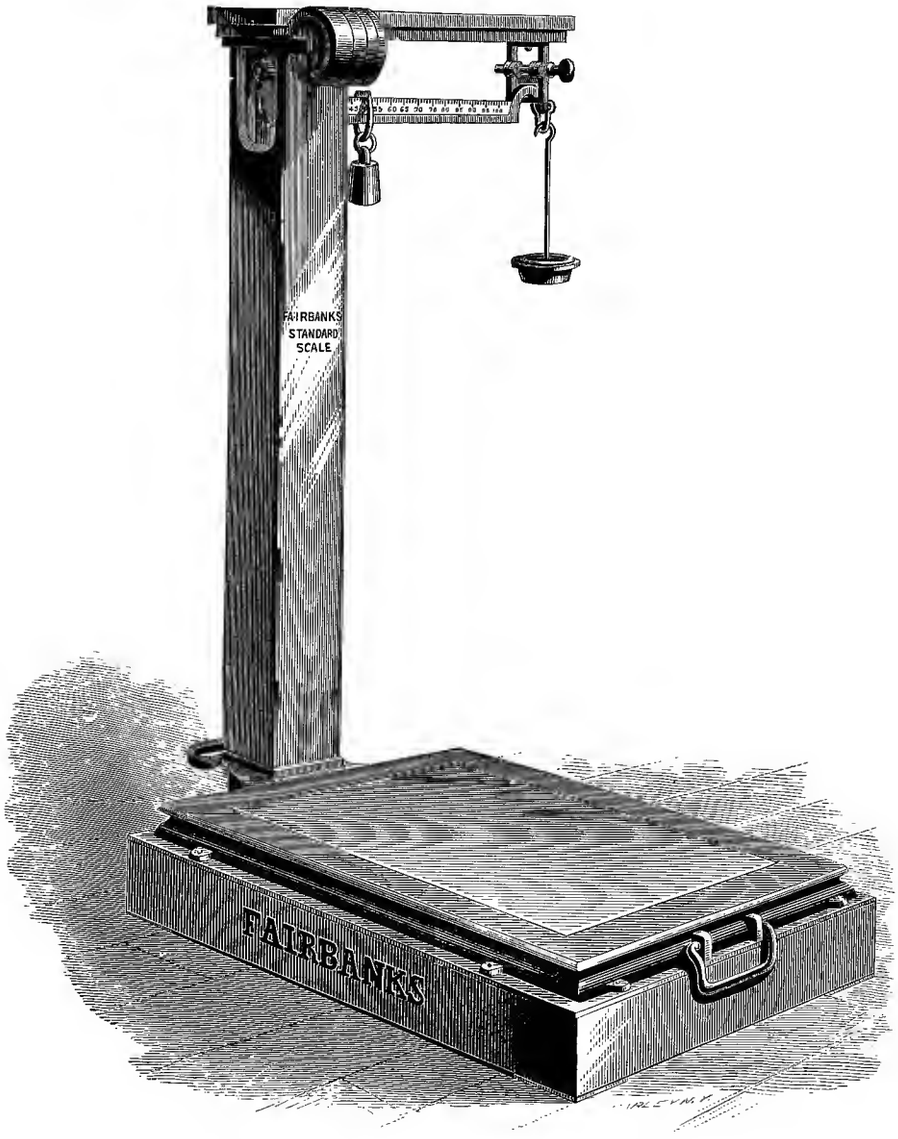
We would invite the particular attention of purchasers from those countries where the standard of weights is about being changed to the Metrical or French System. We are manufacturing Weighing Machines especially arranged for use in such cases. By means of a new invention of our own these Weighing Machines are constructed to weigh, with a single poise on the beam, two distinct standards, so that the same Weighing Machine may be used for either the French or the local standards, thereby enabling the weigher to convert the weight from one standard to the other with great facility, without liability of mistake.

FAIRBANKS'

Portable Weighing Machines.

(WITHOUT WHEELS.)

No.	7	Capacity,	2,000	lbs	Platform,	23×30	in	Price,	$70	00
"	8	"	1,600	"	"	23×30	"	"	60	00
"	9	"	1,400	"	"	21×28	"	"	52	00
"	10	"	1,200	"	"	20×28	"	"	45	00
"	10½	"	900	"	"	17×26	"	"	39	00
"	11	"	600	"	"	16×25	"	"	30	00
"	11½	"	400	"	"	15×21	"	"	23	00



FAIRBANKS'

PORTABLE WEIGHING MACHINE.

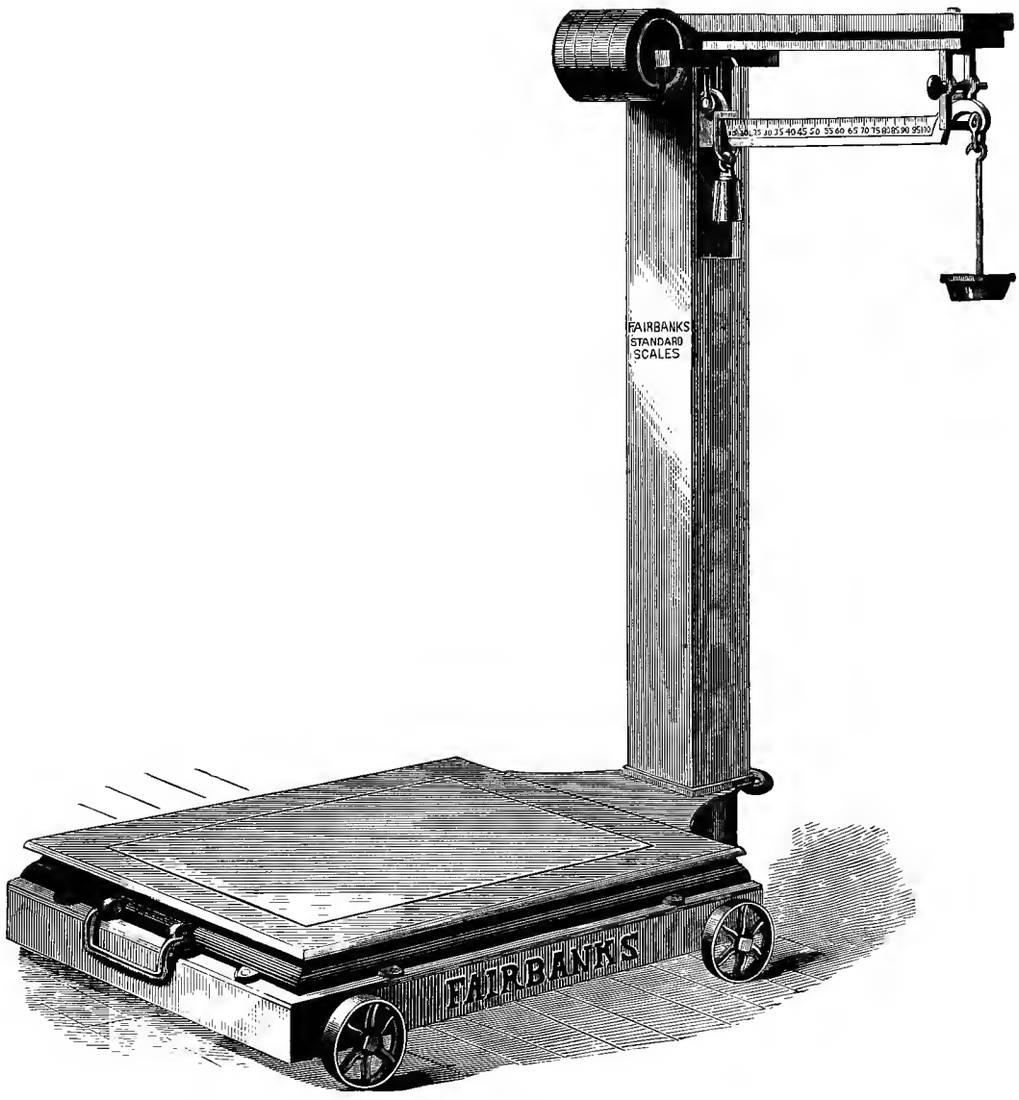
(WITHOUT WHEELS.)

FAIRBANKS'

Portable Weighing Machines.

(WITH WHEELS.)

No.	7	Capacity,	2,000	lbs	Platform,	23×30	in	Price,	$75	00
"	8	"	1,600	"	"	23×30	"	"	65	00
"	9	"	1,400	"	"	21×28	"	"	56	00
"	10	"	1,200	"	"	20×28	"	"	49	00
"	10½	"	900	"	"	17×26	"	"	43	00
"	11	"	600	"	"	16×25	"	"	33	00
"	11½	"	400	"	"	15×21	"	"	26	00



FAIRBANKS'

PORTABLE WEIGHING MACHINE.

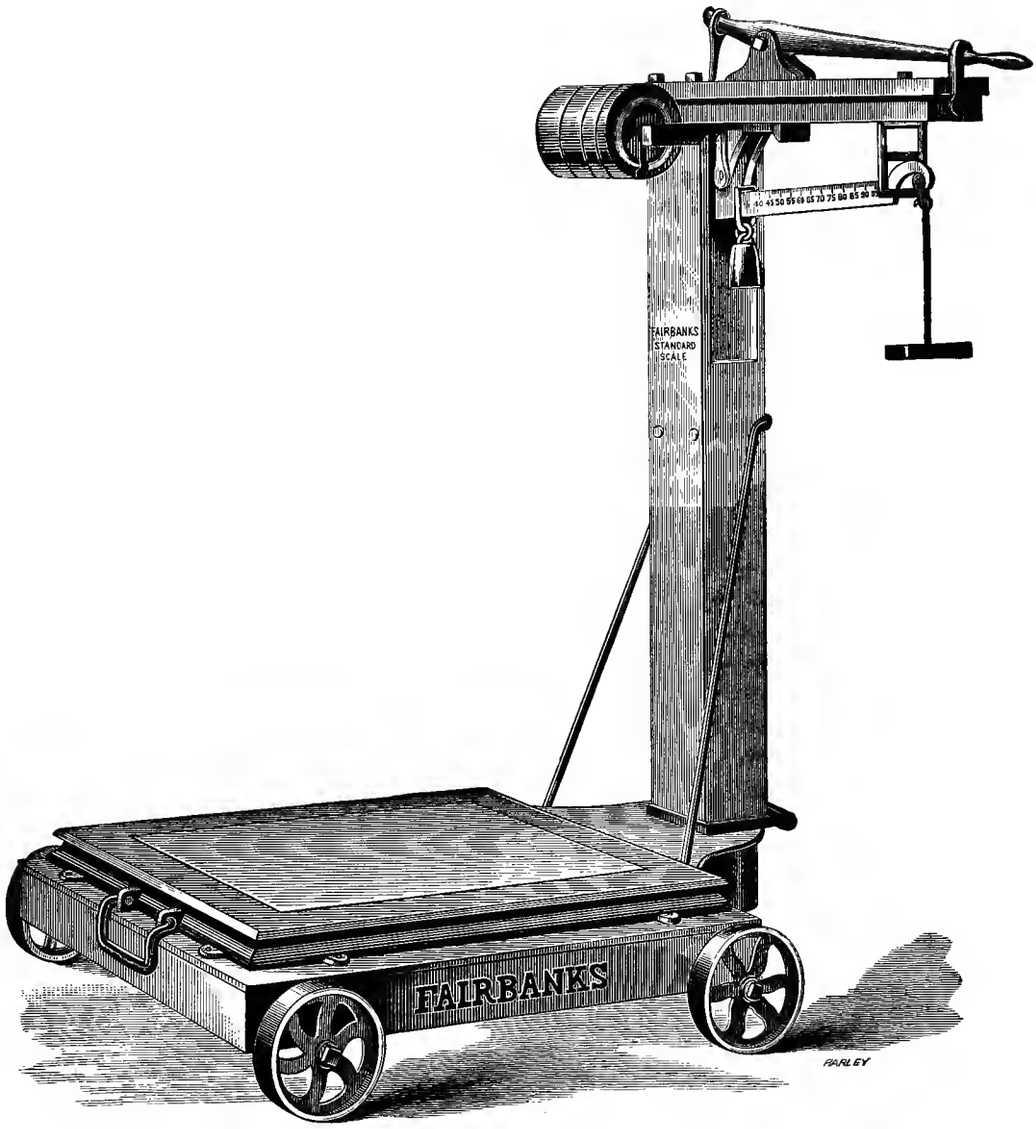
(WITH WHEELS.)

FAIRBANKS'

Portable Weighing Machines.

(WITH HEAVY WHEELS AND DROP LEVER.)

No.	7	Capacity,	2,500 lbs	Platform,	23×30 in	Price,	$94	00
"	8	"	2,000 "	"	23×30 "	"	82	00
"	9	"	1,500 "	"	21×28 "	"	70	00
"	10	"	1,200 "	"	20×28 "	"	59	00
"	10½	"	1,000 "	"	17×26 "	"	51	00



FAIRBANKS'

PORTABLE WEIGHING MACHINE.

(WITH HEAVY WHEELS AND DROP LEVER.)

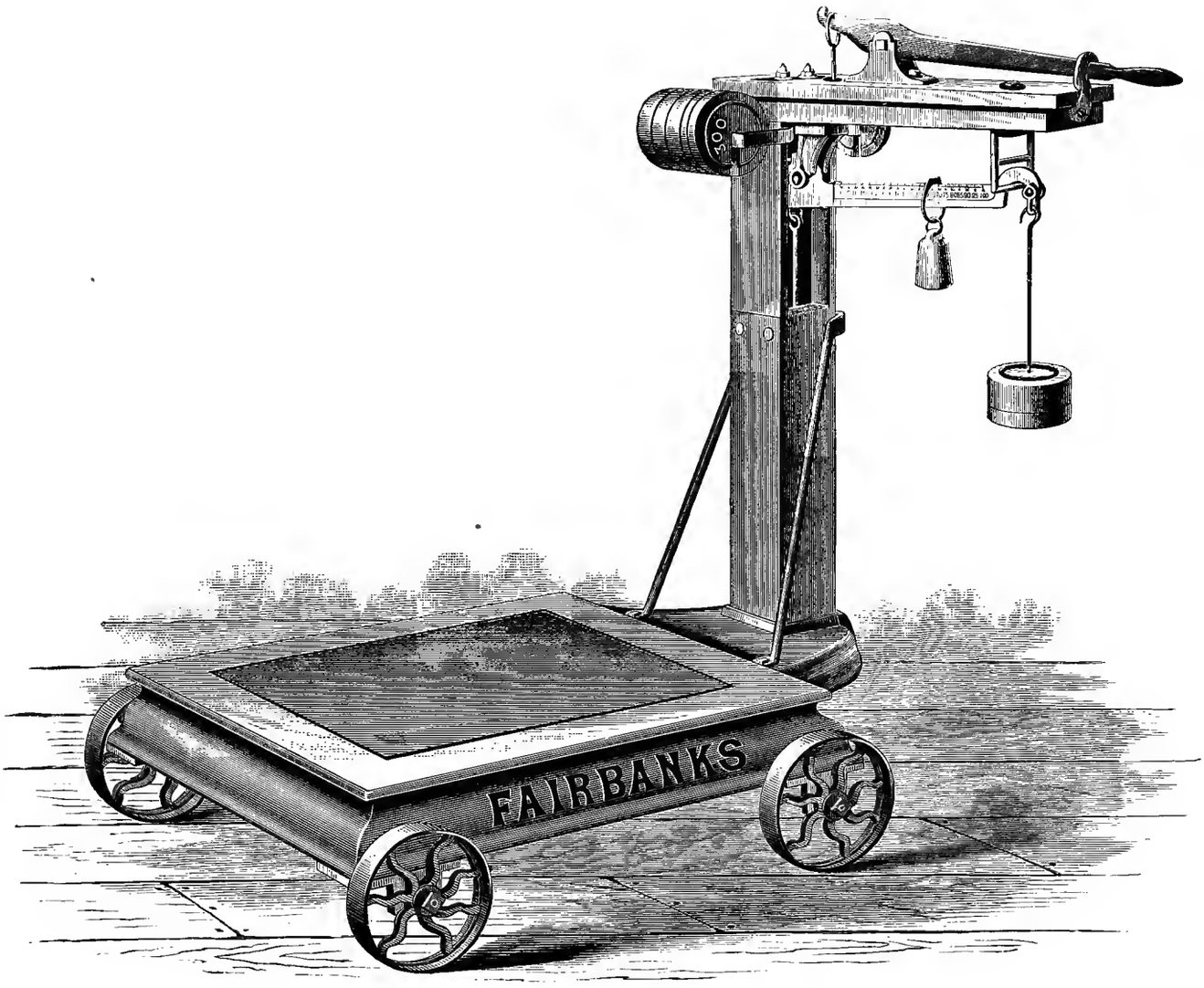
FAIRBANKS'

Portable Weighing Machines.

(EXTRA HEAVY, WITH 12 IN. WHEELS AND DROP LEVER.)

No. 2, Capacity 3,000 lbs... .. .Platform, 30×39 in. .... .Price, $125 00

This is one of the heaviest and strongest Portable Machines in use.



FAIRBANKS'

PORTABLE WEIGHING MACHINES.

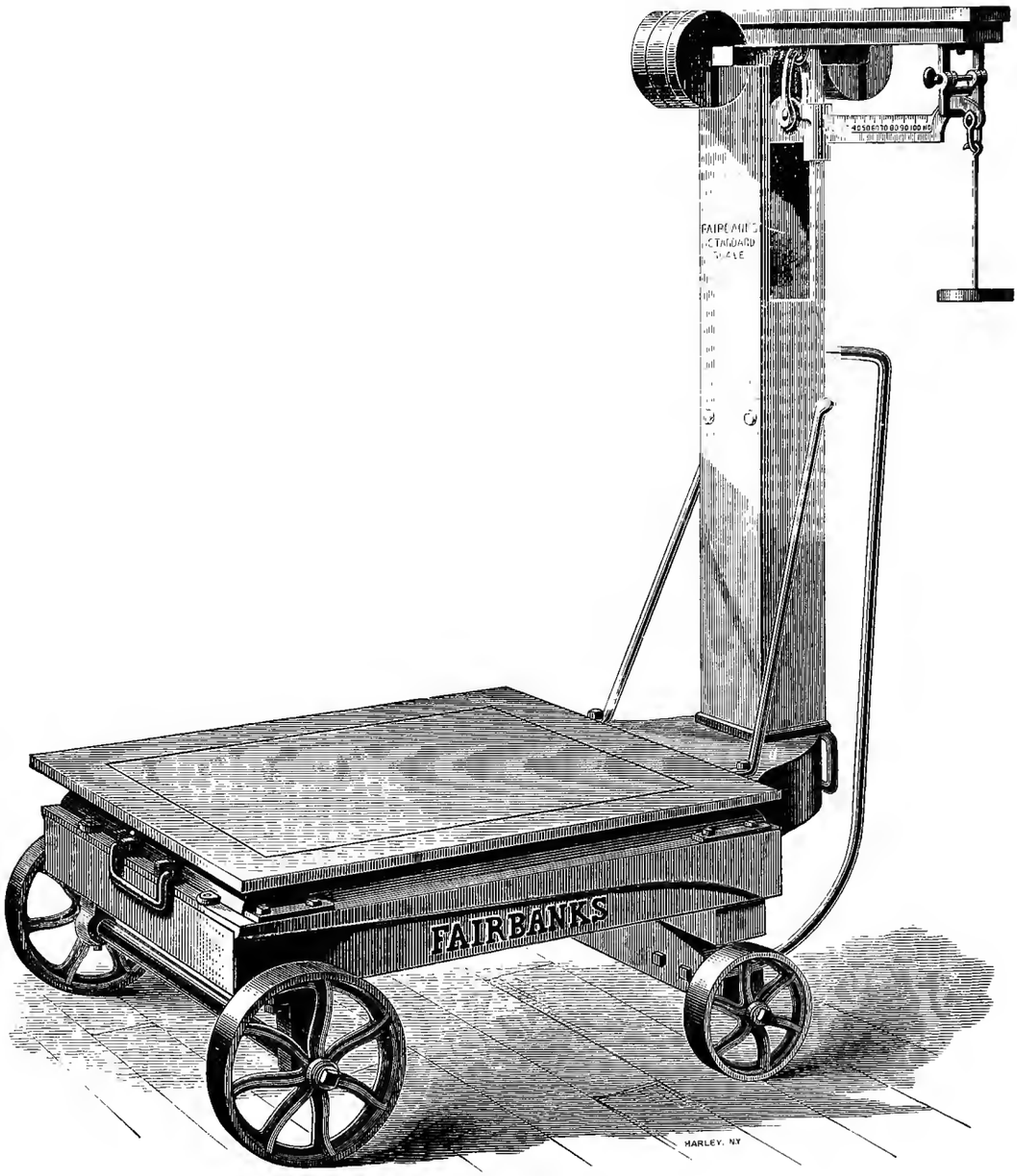
(EXTRA HEAVY, WITH WHEELS AND DROP LEVER.)

FAIRBANKS'

Portable Weighing Machines.

(WITH WHEELS AND VIBRATORY OR SWIVEL AXLE.)

No. 7	Capacity, 2,500 lbs	Platform, 30×23 in	Price,	$102 00
" 8	" 2,000 "	" 30×23 "	"	90 00
" 9	" 1,500 "	" 28×21 "	"	77 00
" 10	" 1,200 "	" 28×20 "	"	65 00
" 10½	" 1,000 "	" 26×17 "	"	57 00



FAIRBANKS'

PORTABLE WEIGHING MACHINE.

(WITH WHEELS AND VIBRATORY AXLE.)

FAIRBANKS'

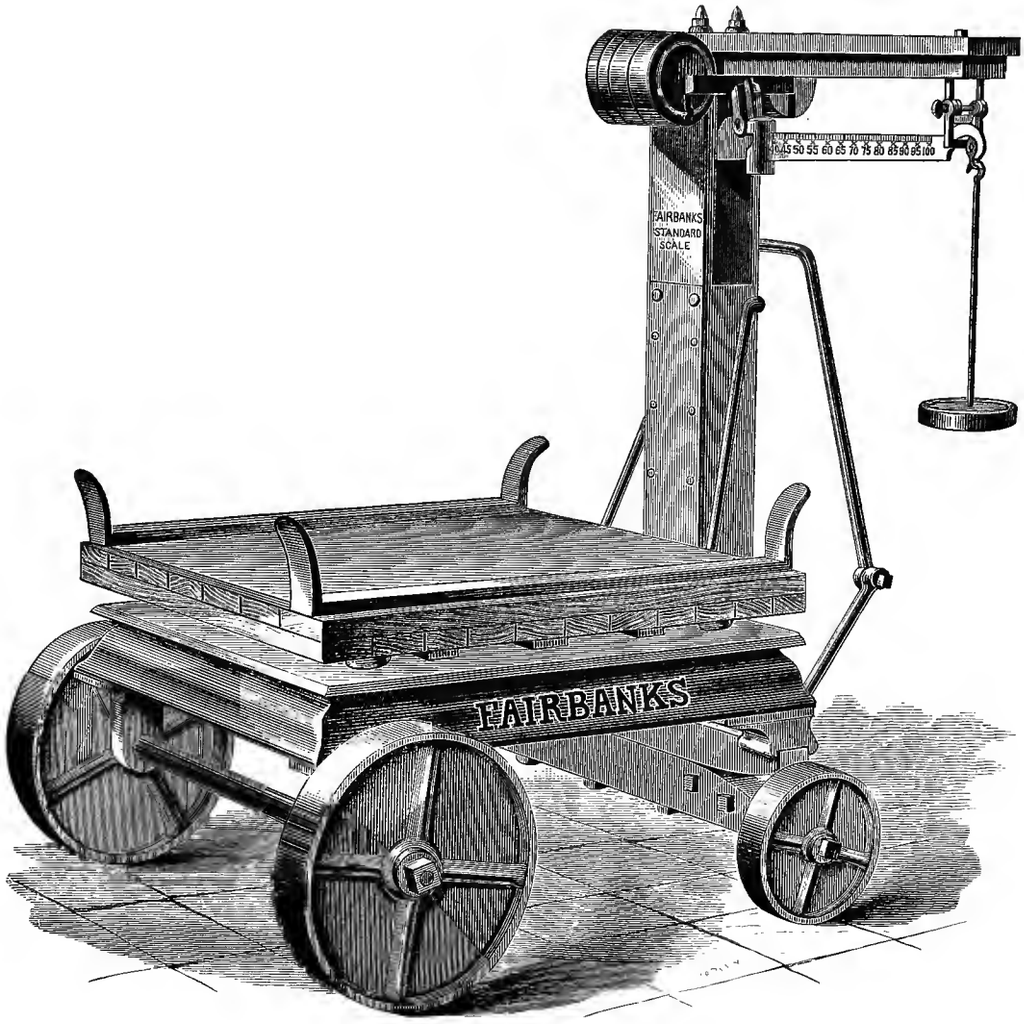
Rolling Mill or Iron Weighing Machines.

(WITH RUBBER SPRING PLATFORM.)

These machines are made in the most durable manner, and intended for the heaviest weighing and the roughest usage. By a new and valuable improvement they are fitted with double platforms supported upon rubber springs, which act to prevent any breakage by the concussions caused by throwing on heavy weights. The platforms are fitted with racks for weighing bar iron, or with a plain surface.

The front axle works on a swivel, rendering it easy to move the machine about.

1st Size	Capacity, 4,000 lbs	Platform, 39×30 in	Price,	$160 00
2d "	" 2,500 "	" 30×23 "	"	125 00
Extra Heavy	" 6,000 "	" 30×23 "	"	185 00
" "	" 8,000 "	" 30×23 "	"	210 00
" "	" 10,000 "	" 30×23 "	"	225 00



FAIRBANKS'

ROLLING MILL OR IRON WEIGHING MACHINE.

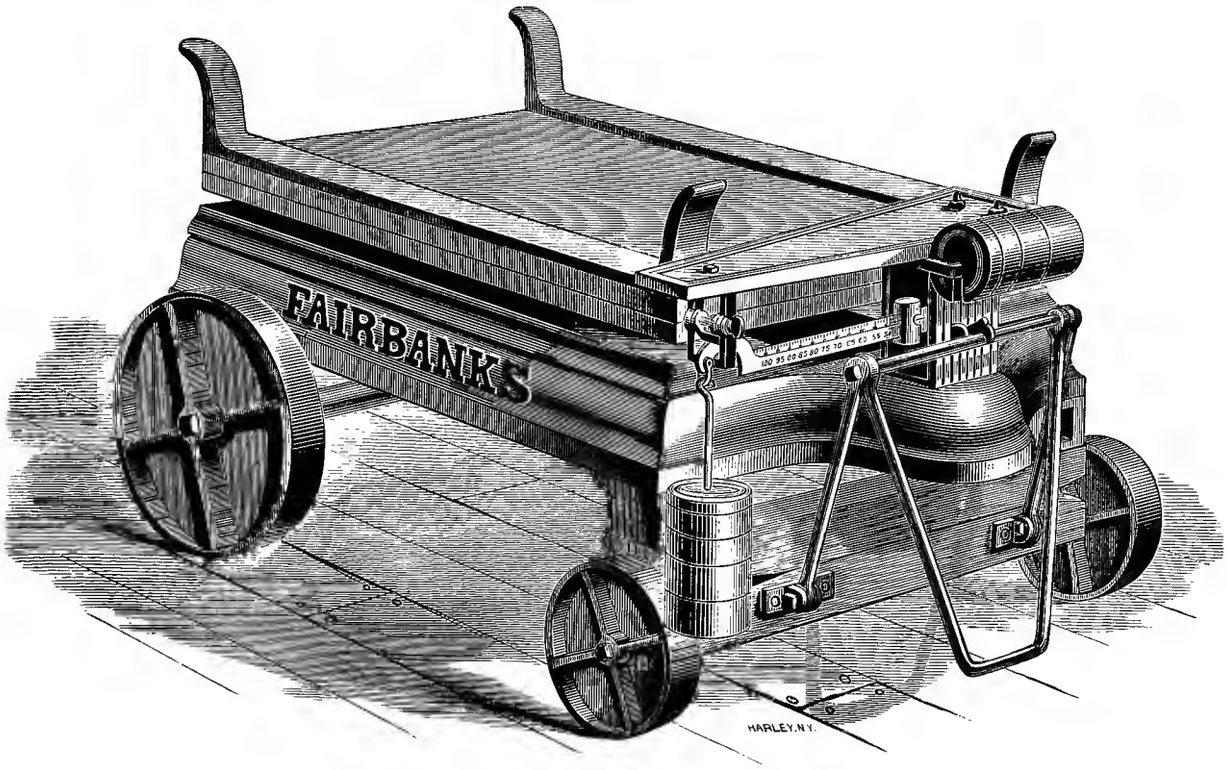
(WITH RUBBER SPRING PLATFORM.)

FAIRBANKS'

Rolling Mill or Iron Weighing Machines.

(WITH RUBBER SPRING PLATFORM, EXTRA HEAVY.)

Capacity,	6,000 lbs	Platform,	39×30 in	Price,	$185	00
"	8,000 "	"	39×30 "	"	210	00
"	10,000 "	"	39×30 "	"	225	00



FAIRBANKS'

ROLLING MILL OR IRON WEIGHING MACHINE.

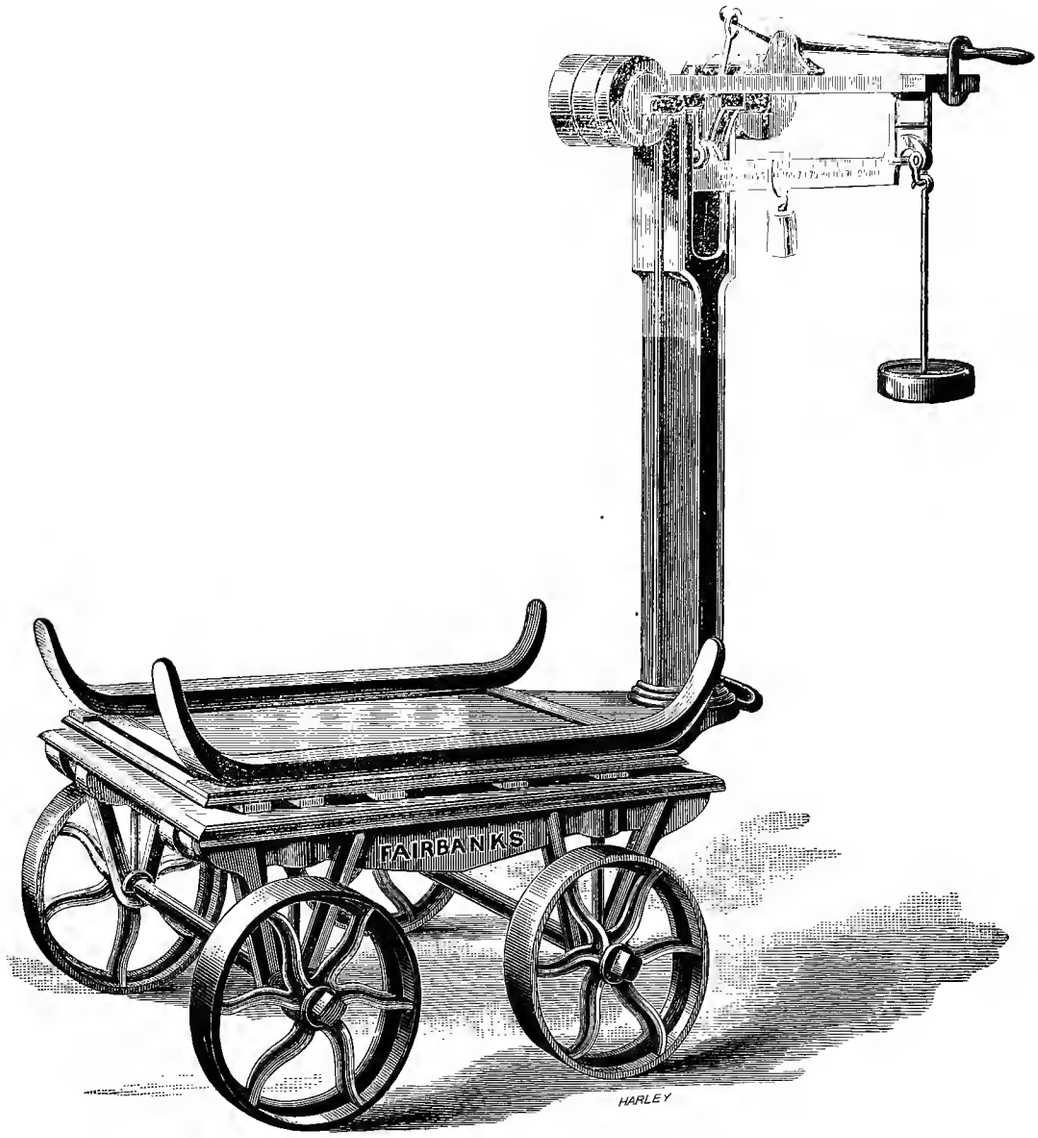
(WITH RUBBER SPRING PLATFORM, EXTRA HEAVY.)

FAIRBANKS'

Metal Weighing Machine.

This Weighing Machine is constructed entirely of metal, and designed for weighing hot bar iron.

Capacity,	2,500 lbs	Platform,	22×35 in	Price,	$110 00
"	1,500 "	"	21×28 "	"	86 00
"	1,200 "	"	20×28 "	"	70 00



FAIRBANKS'

METAL WEIGHING MACHINE.

FAIRBANKS'

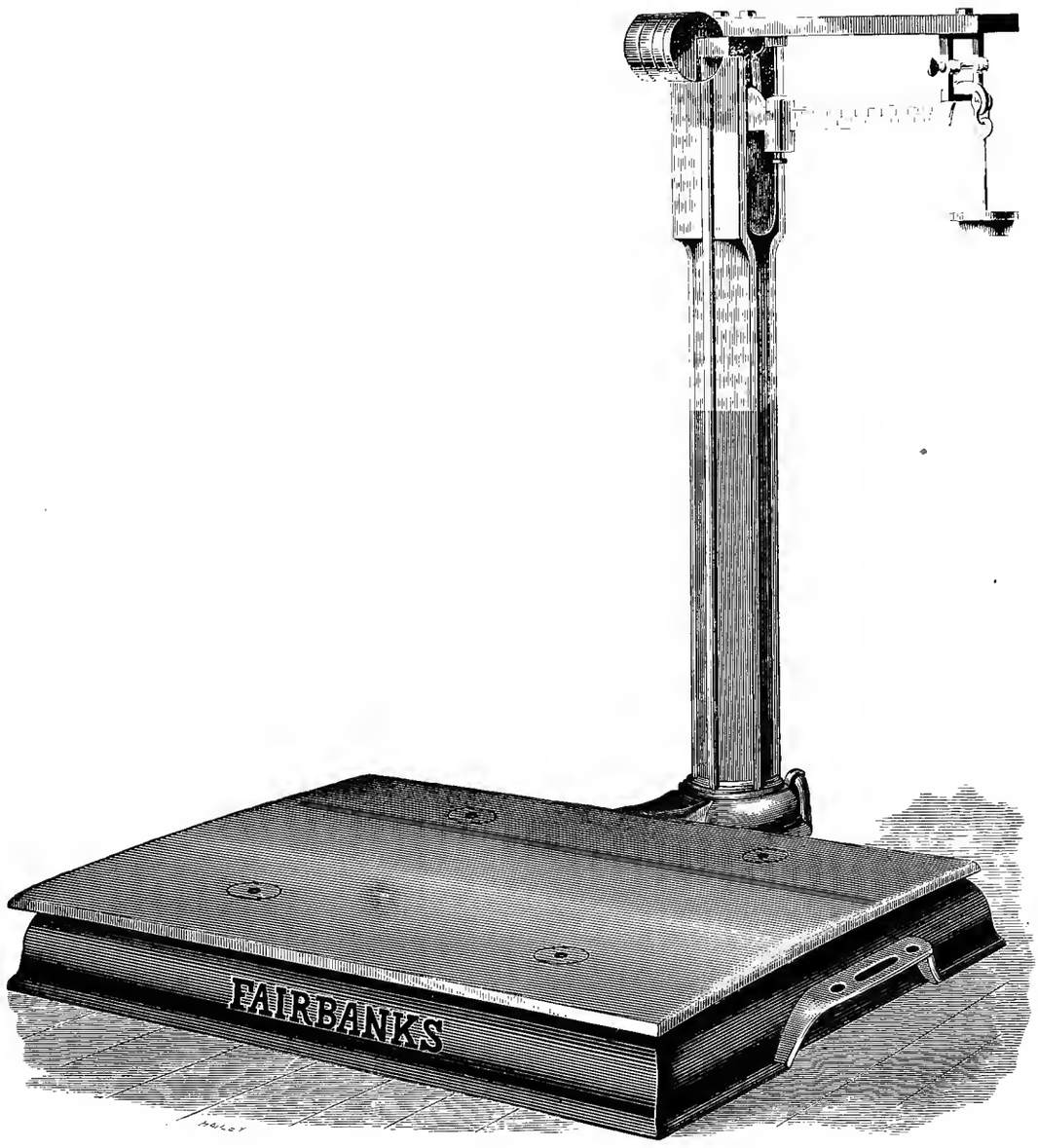
Wheelbarrow Weighing Machines.

(NEW PATTERN, EXTRA HEAVY.)

Platform, $2\frac{1}{2} \times 3\frac{1}{2}$ feet..... Capacity, 1,000 lbs..... Price, $70 00

(WITH WHEELS.)

Platform, $2\frac{1}{2} \times 3\frac{1}{2}$ feet..... Capacity, 1,000 lbs..... Price, $75 00



FAIRBANKS'

WHEELBARROW WEIGHING MACHINE.

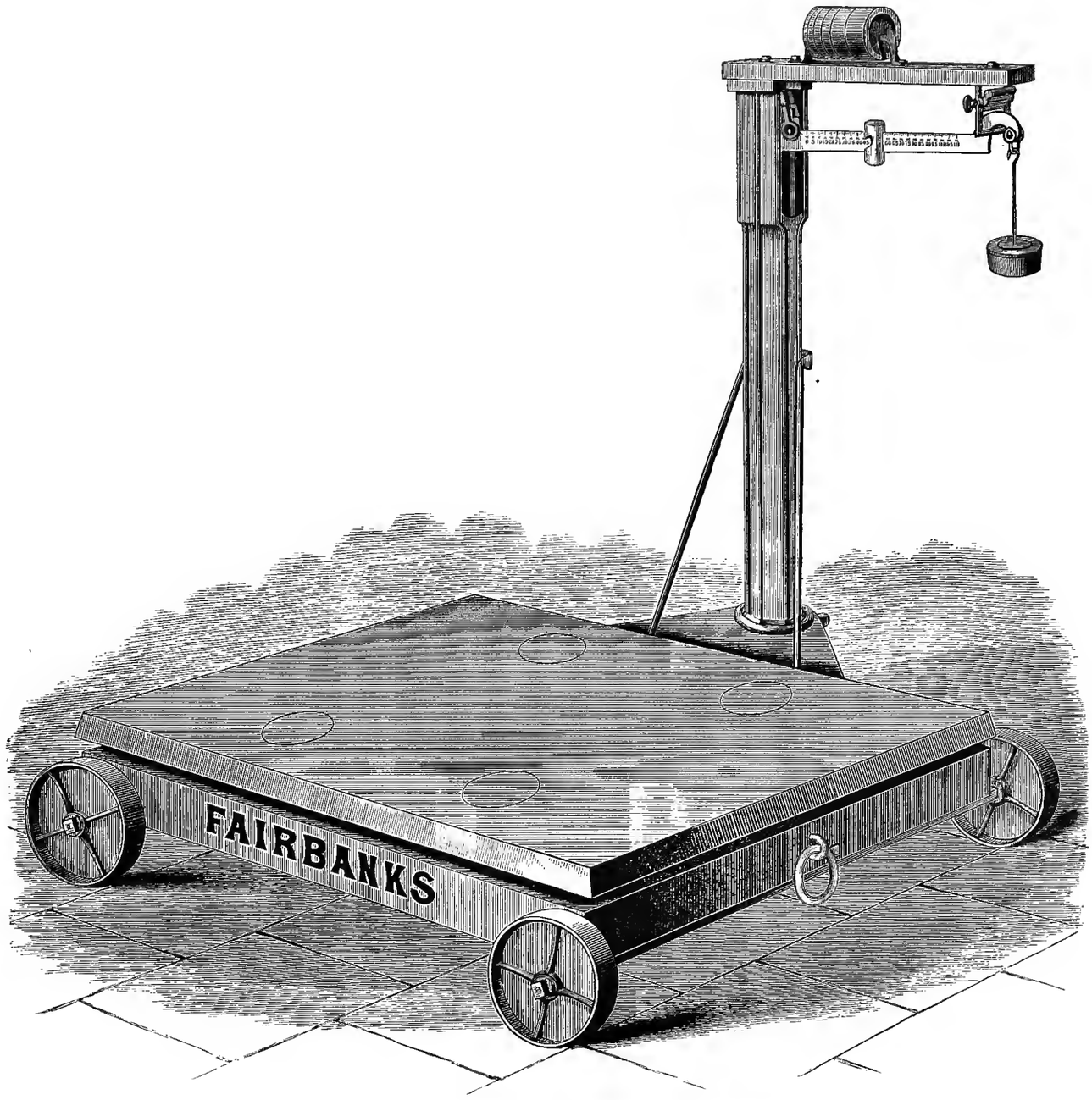
FAIRBANKS'

Portable Weighing Machine.

(WITH WHEELS AND BRASS SLIDE, POISE BEAM.)

No. 6, Capacity, 2,500 lbs.....Platform, 35×44.....Price, $126 00

Composed entirely of metal, very heavy and durable.



FAIRBANKS'

PORTABLE PLATFORM WEIGHING MACHINE.

No. 6.

FAIRBANKS'

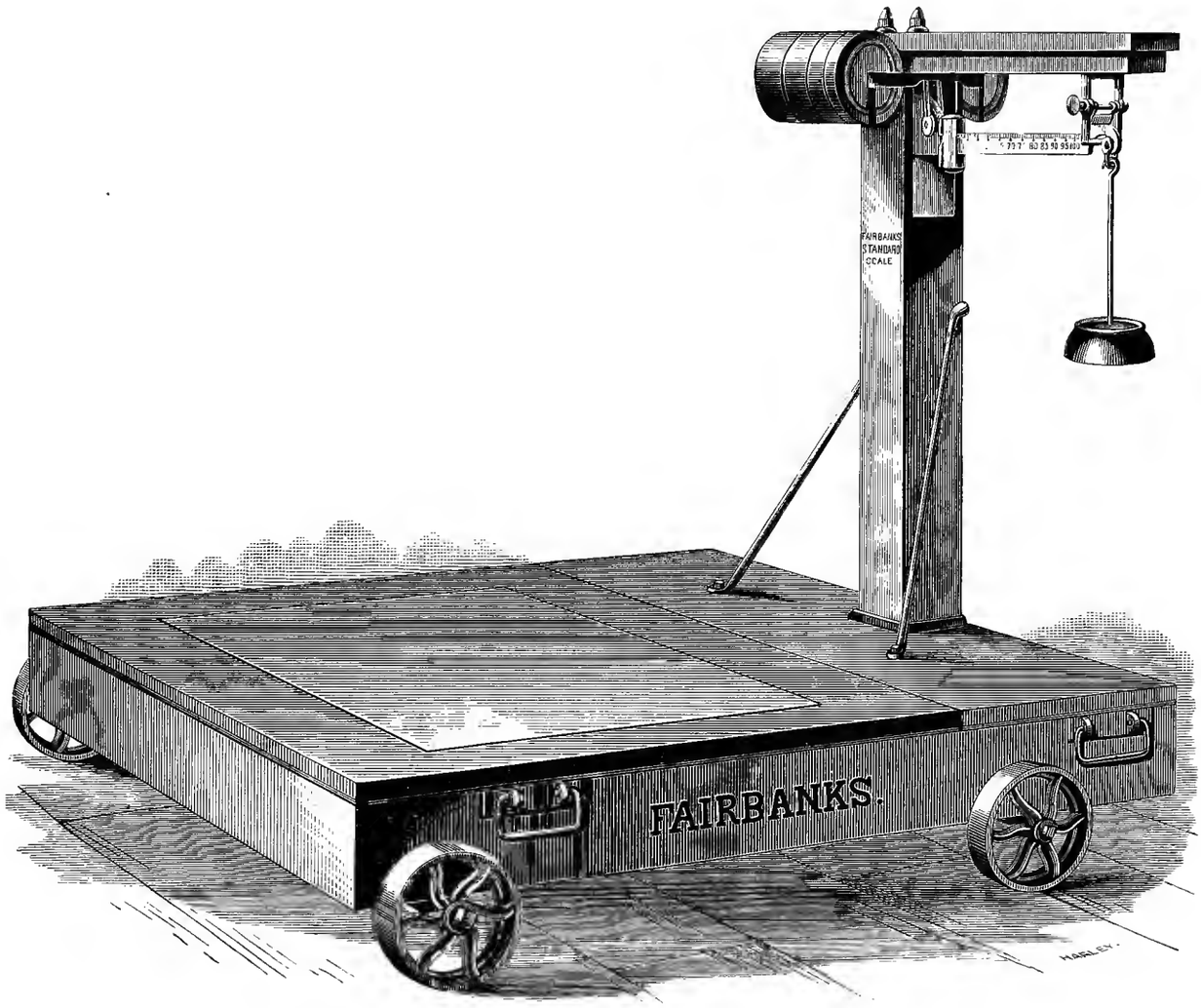
Portable Warehouse Weighing Machines.

(WITH WHEELS.)

No. 1	Capacity,	5,000 lbs	Platform,	48×48 in	Price,	$185	00
" 4	"	3,500 "	"	42×44 "	"	125	00
" 5	"	2,500 "	"	31×40 "	"	105	00

(WITHOUT WHEELS.)

No. 1	Capacity,	5,000 lbs	Platform,	48×48 in	Price,	$170	00
" 4	"	3,500 "	"	42×44 "	"	110	00
" 5	"	2,500 "	"	31×40 "	"	95	00



FAIRBANKS'

PORTABLE WAREHOUSE WEIGHING MACHINE,

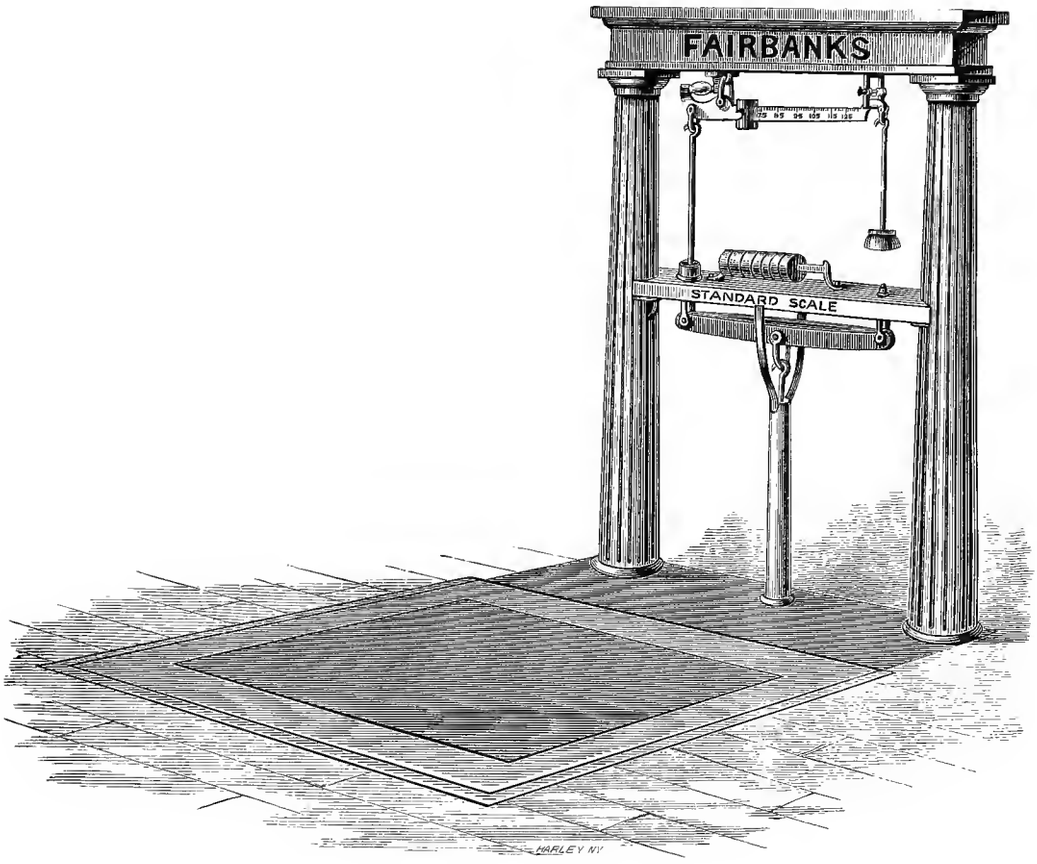
(WITH WHEELS.)

FAIRBANKS'

Dormant Warehouse Weighing Machines.

(WITH TWO IRON PILLARS AND SLIDING POISE BEAM.)

No. 1	Capacity,	5,000 lbs	Platform,	48×48 in	Price, $170 00
" 4	"	3,500 "	"	42×44 "	" 125 00
" 5	"	2,500 "	"	31×40 "	" 105 00
" 4	"	3,500 "	"	42×44 "	Long Neck, 135 00



FAIRBANKS'

DORMANT WAREHOUSE WEIGHING MACHINE,

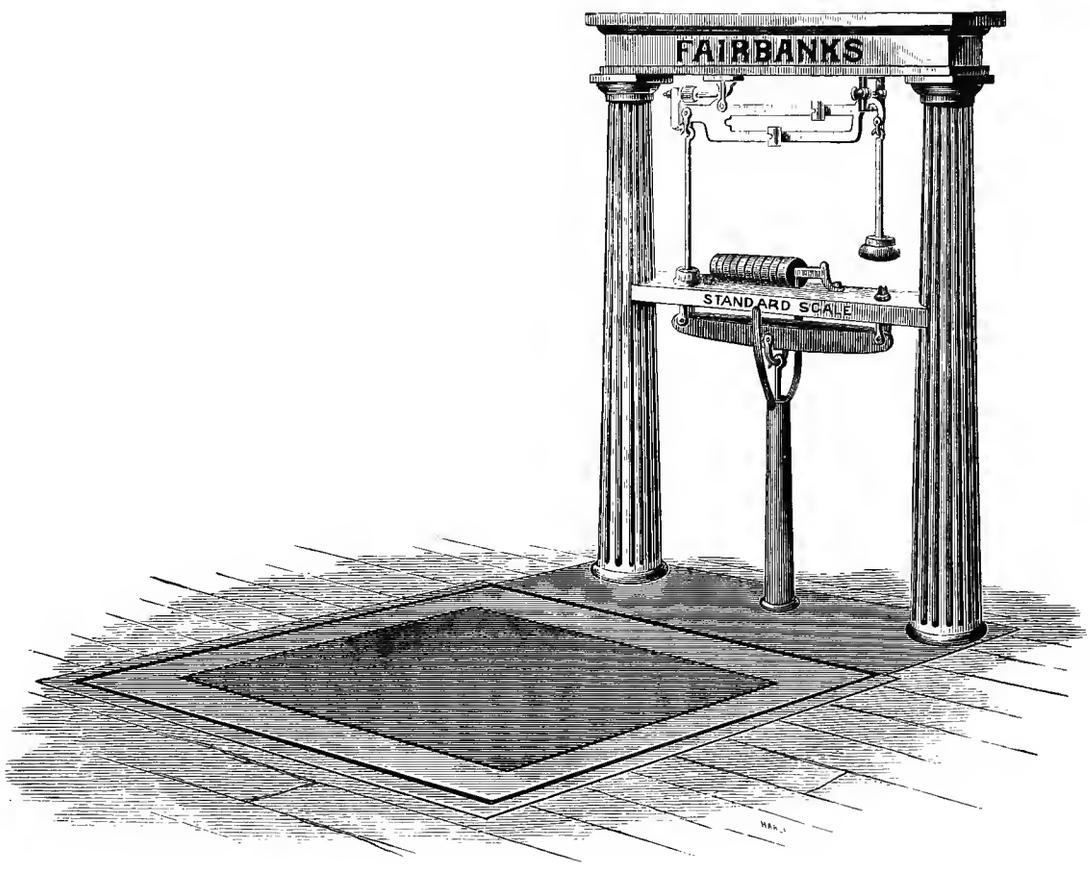
(WITH TWO IRON PILLARS.)

FAIRBANKS'

Dormant Warehouse Weighing Machines.

(WITH TWO IRON PILLARS AND DOUBLE SLIDING POISE BEAM.)

No. 1	Capacity, 5,000 lbs	Platform, 48×48 in		Price,	$180 00
" 4	" 3,500 "	" 42×44 "		"	133 00
" 5	" 2,500 "	" 31×40 "		"	113 00
" 4	" 3,500 "	" 42×44 "	Long Neck "		143 00



FAIRBANKS'

DORMANT WAREHOUSE WEIGHING MACHINE.

(WITH TWO IRON PILLARS AND DOUBLE BEAM.)

FAIRBANKS'

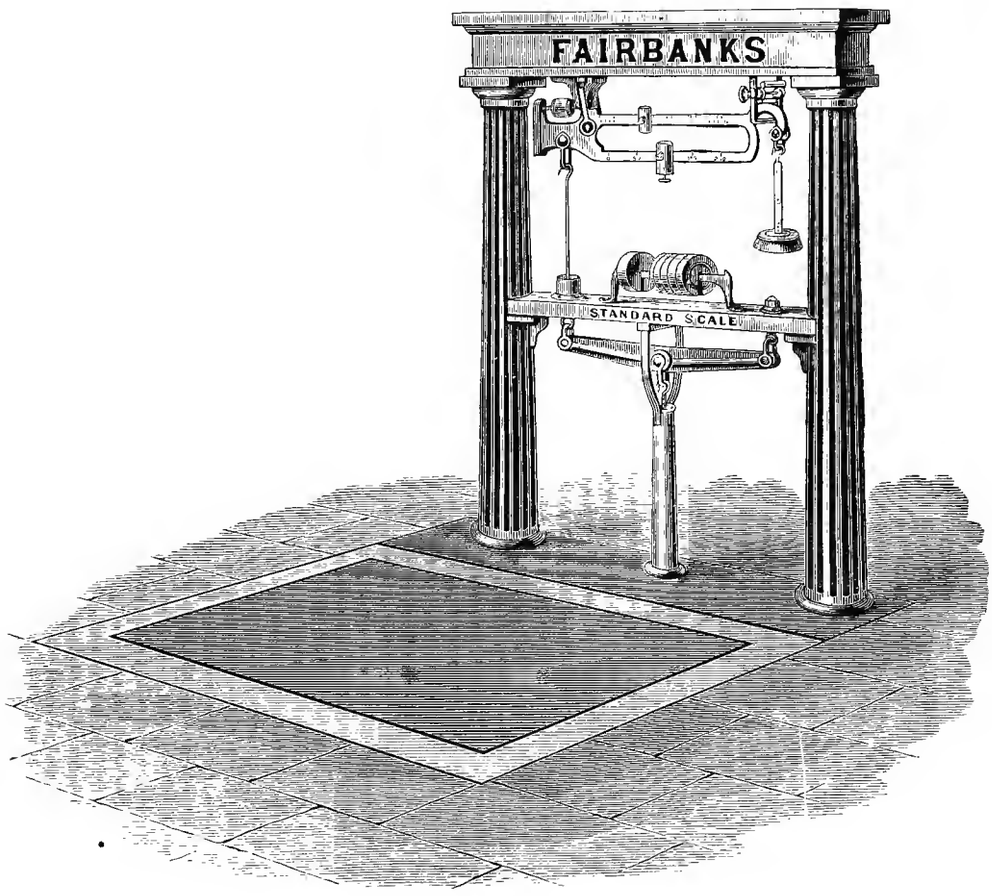
Dormant Cloth Weighing Machine.

Capacity, 2,000 lbs.... ....Platform, 37×46 in.

Price, single pillar, similar to machine on page 51, ...$85 00

Two Iron Pillars and Single Beam, ... 99 00

Double Beam, $6.00 Extra.



FAIRBANKS'

DORMANT CLOTH WEIGHING MACHINE.

FAIRBANKS'

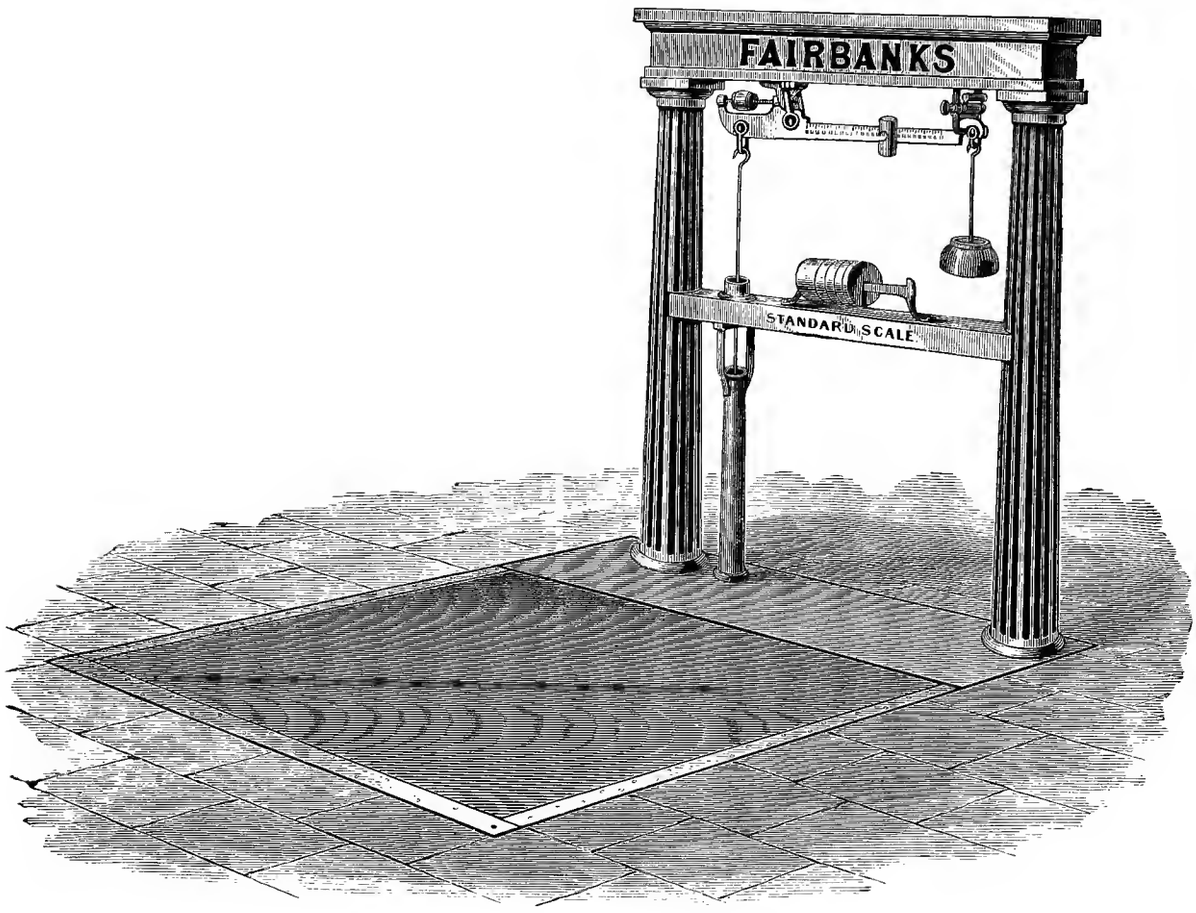
Dormant Cotton Weighing Machine.

Capacity, 1,500 lbs.. ....Platform, 48×54 in.

Single Pillar, similar to machine on page 51. ... ...$87 00

Two Iron Pillars, like engraving. ... .100 00

Extra for Double Beam, $8.00



FAIRBANKS'

DORMANT COTTON WEIGHING MACHINE.

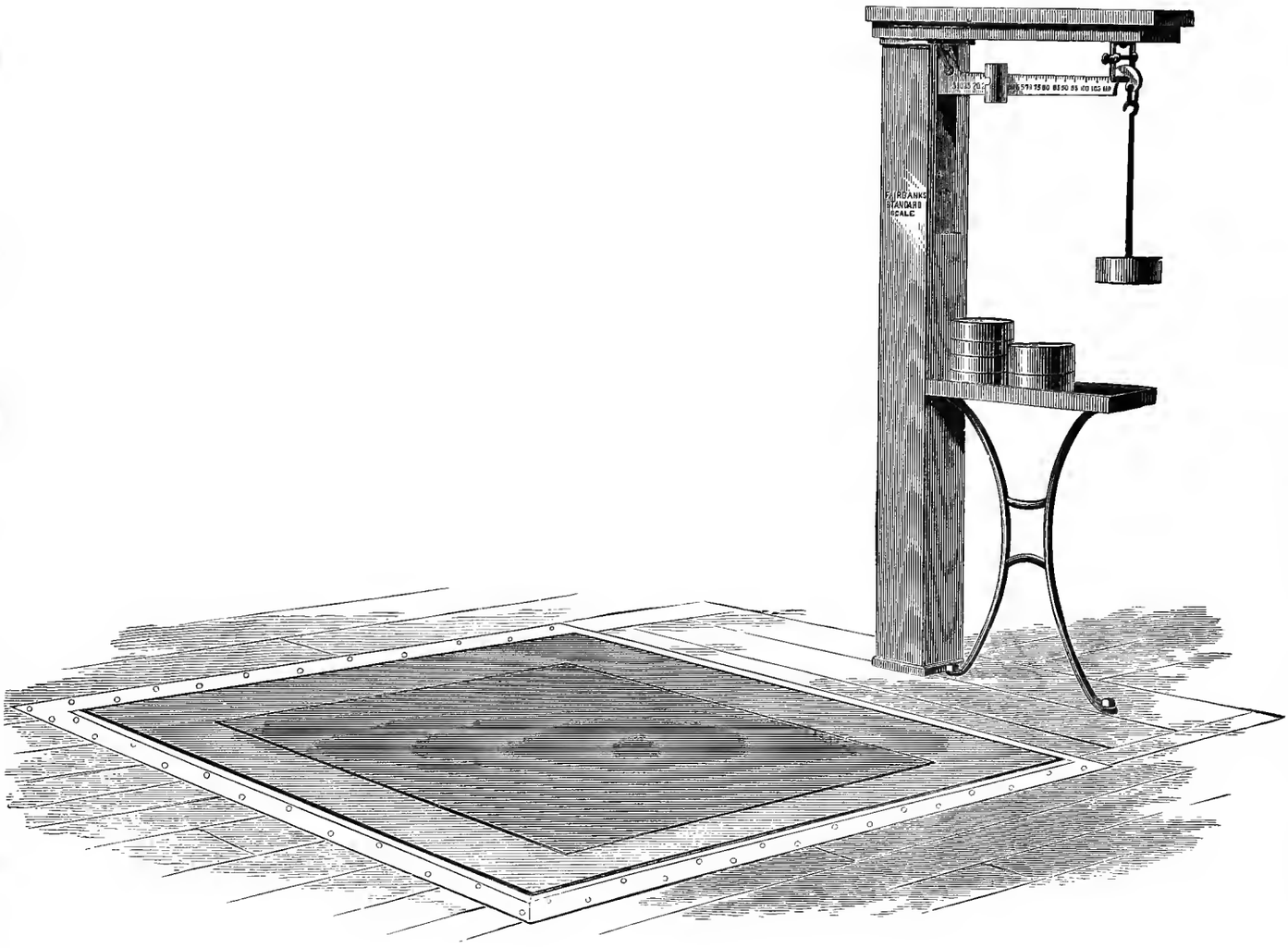
FAIRBANKS'

Dormant Warehouse Weighing Machines.

(WITH SINGLE PILLAR.)

No. 1	Capacity,	5,000	lbs	Platform,	48×48	in	Price,	$150	00
" 4	"	3,500	"	"	42×44	"	"	105	00
" 5	"	2,500	"	"	31×40	"	"	92	00
" 7	"	2,000	"	"	25×34	"	"	78	00
" 9	"	1,500	"	"	21×31	"	"	68	00

These scales are furnished with drop levers when desired, at above prices.



FAIRBANKS'

DORMANT WAREHOUSE WEIGHING MACHINE.

(WITH SINGLE PILLAR.)

FAIRBANKS'

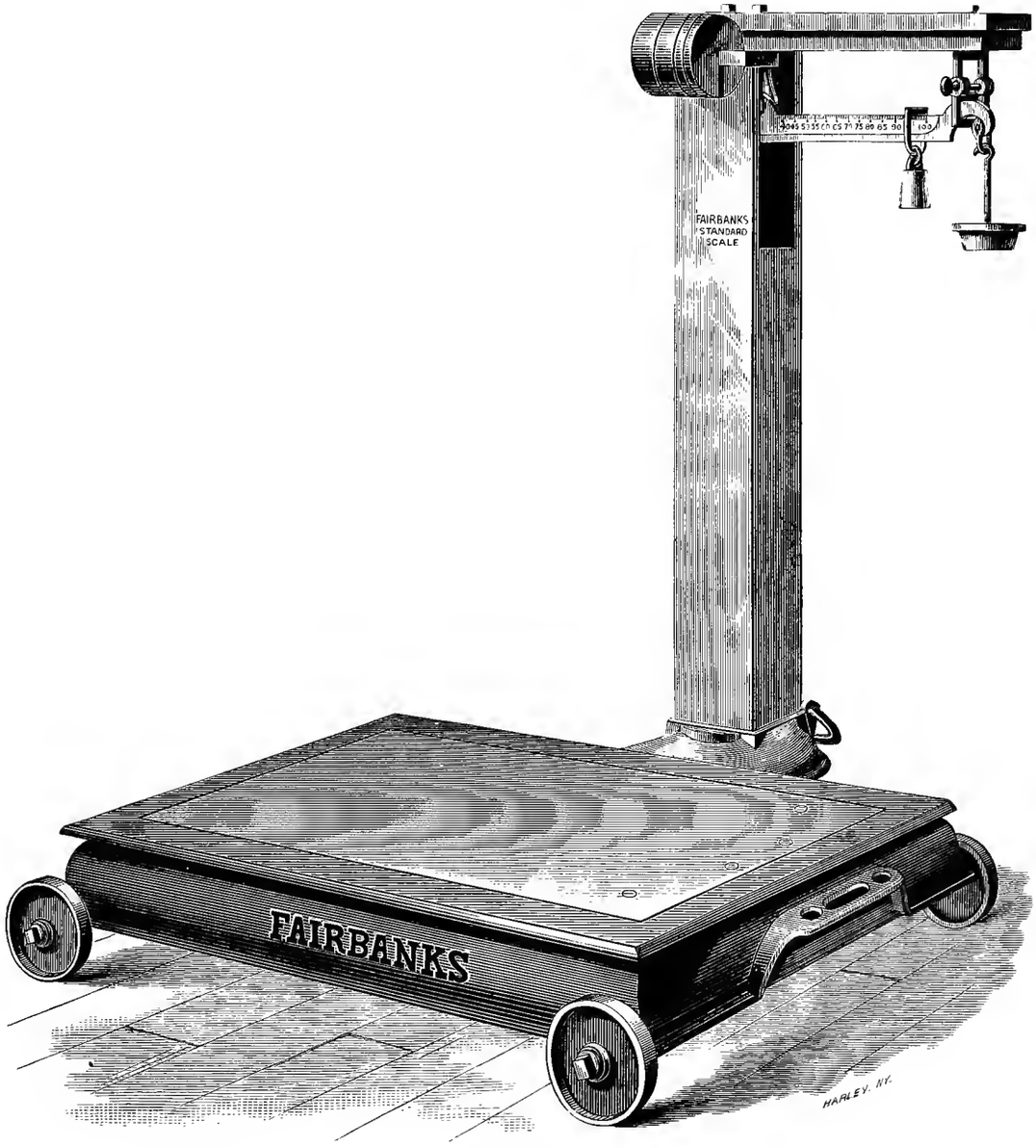
Millers' and Grain Dealers' or Pork Weighing Machines.

(WITH WHEELS.)

Capacity,	1,000 lbs	Platform,	30×42 in	Price,	$73 00
"	1,800 "	"	35×44 "	"	94 00

(WITHOUT WHEELS.)

Capacity,	1,000 "	"	30×42 in	Price,	$68 00
"	1,800 "	"	35×44 "	"	87 00



FAIRBANKS'

MILLERS' AND GRAIN DEALERS' OR PORK WEIGHING MACHINE.

(WITH WHEELS.)

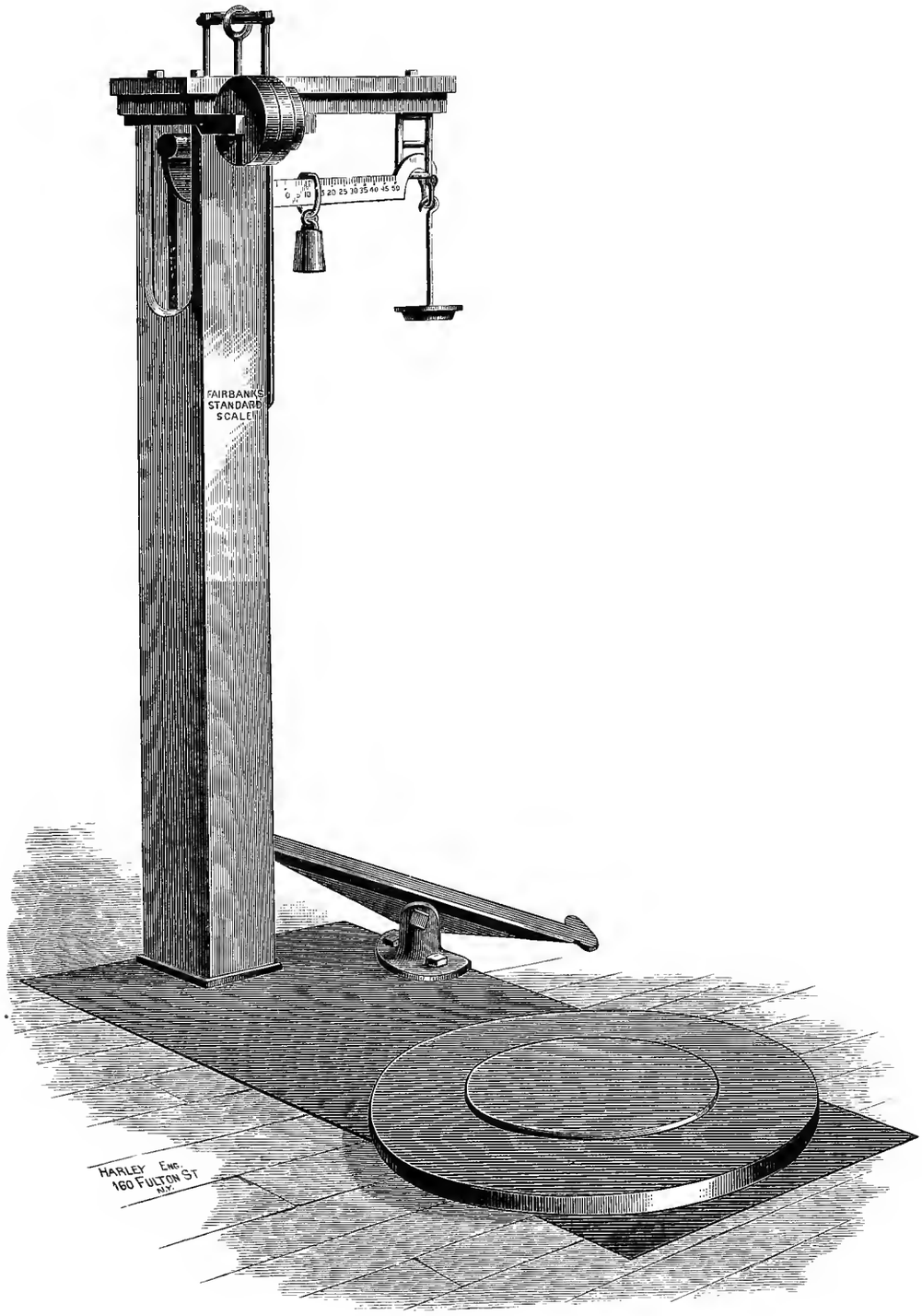
FAIRBANKS'

Dormant Flour Packing Weighing Machine.

This Weighing Machine is of great value in Flouring Mills. It is fitted into the floor like a Dormant Weighing Machine, immediately beneath the machinery used in packing, and has a circular platform just large enough to fill the head of a barrel. On this the barrel is placed, empty, and when filled is subjected to the pressure of the packing machinery. A lever, operated by the foot, then brings the apparatus of the Weighing machine into action, and the exact weight of the flour is at once indicated. The Weighing Machine has also a smaller platform for packing half-barrels.

Capacity, 248 lbs.. .. ....Platform, 18 in. diameter... ..Price, $50 00

Price of Weighing Machine does not include Press.



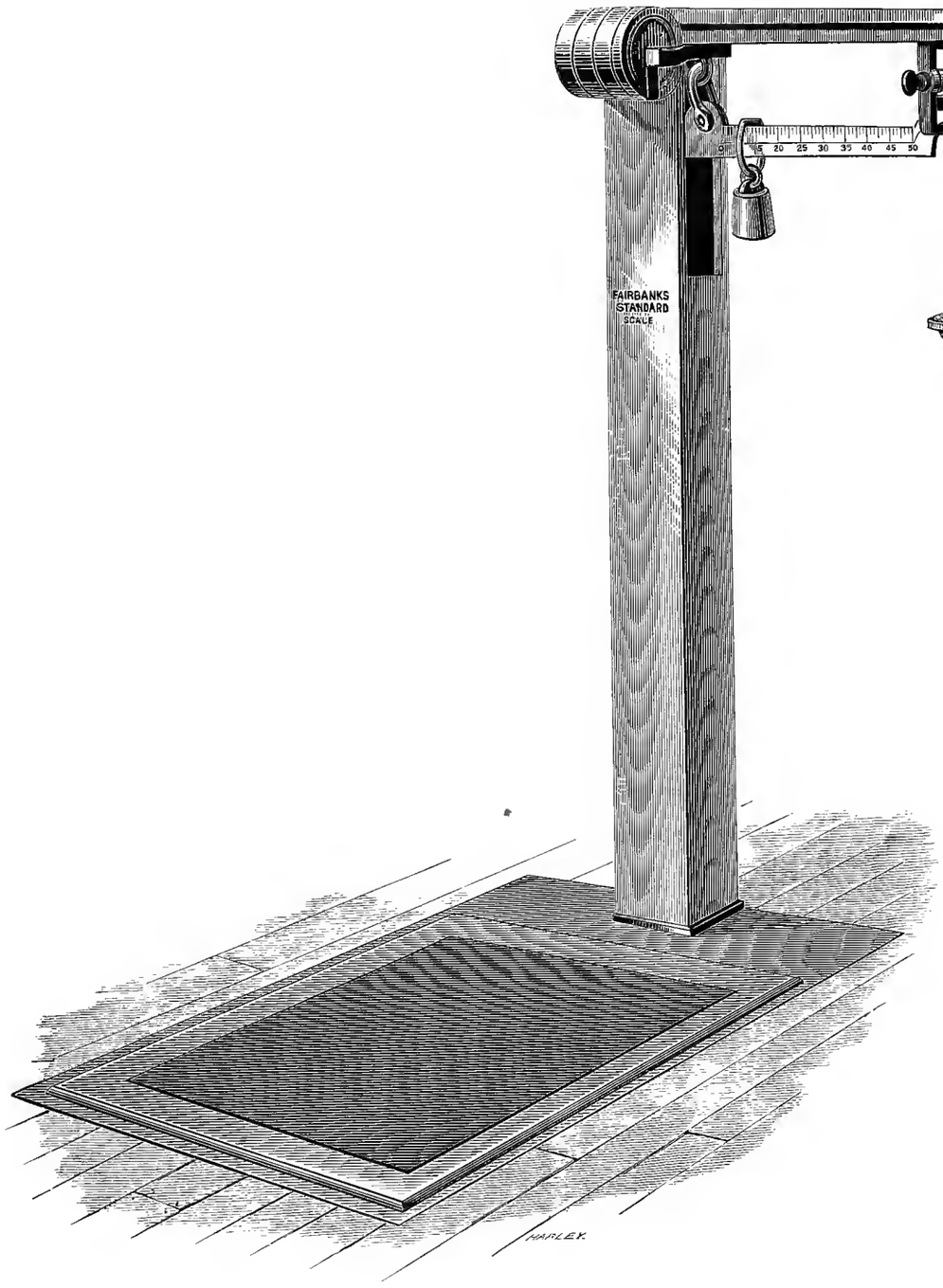
FAIRBANKS'
DORMANT
FLOUR PACKING WEIGHING MACHINE.

FAIRBANKS'

Dormant Flour Weighing Machine.

This particular modification of Weighing Machine is designed for weighing barrels of flour, and to be used separate from Press.

Capacity, 600 lbs.. ... ...Platform, 16×25 in.. .. .. .Price, $40 00



FAIRBANKS'

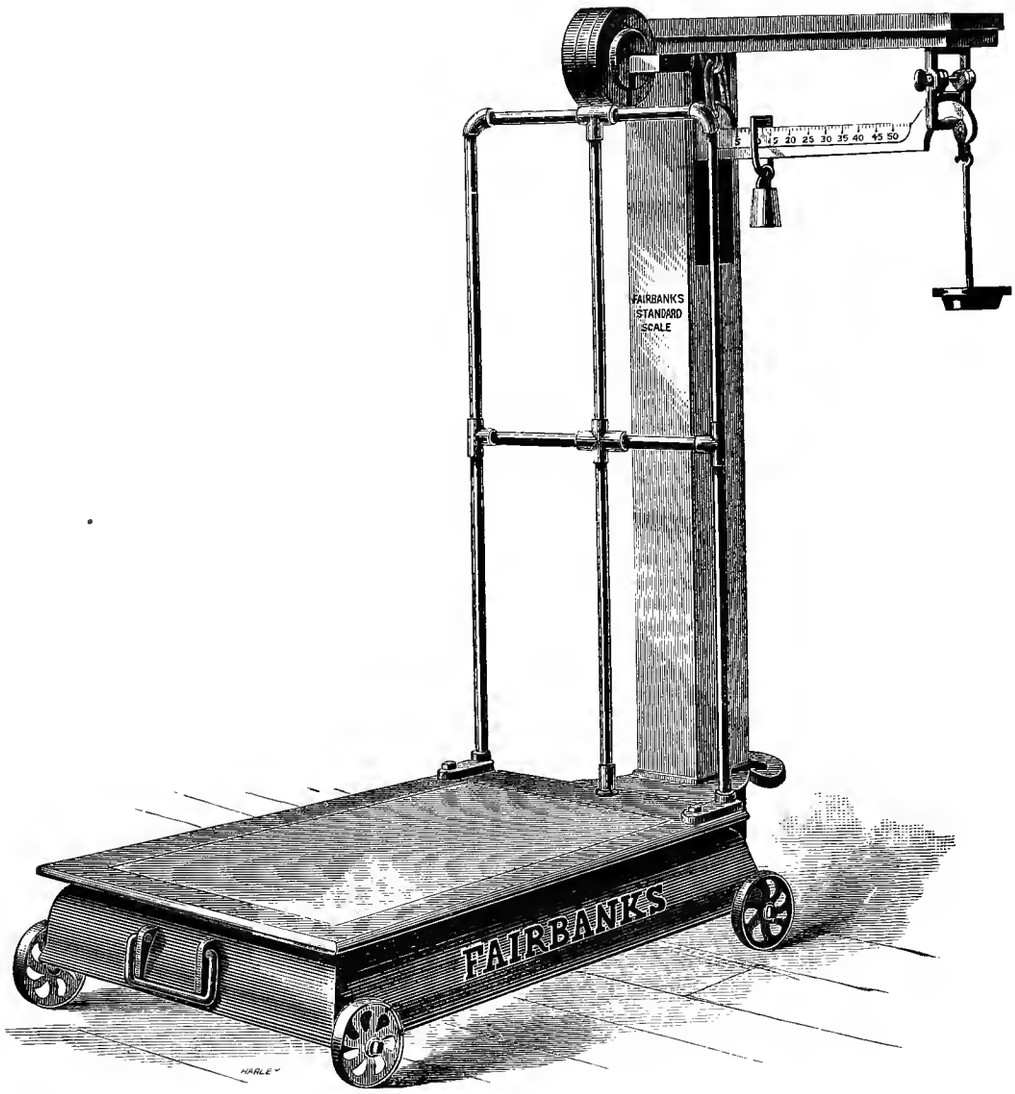
DORMANT FLOUR WEIGHING MACHINE.

FAIRBANKS'

Portable Platform Weighing Machines.

Machine arranged with Bag Rack for supporting Sacks and Bales.

No. 7.	Capacity,	2,000 lbs	With Wheels		$79 00	Without Wheels		$74 00
" 8.	"	1,600 "	"	"	69 00	"	"	64 00
" 9	"	1,400 "	"	"	59 50	"	"	55 50
" 10.	"	1,200 "	"	"	52 50	"	"	48 50
" 10½.	"	900 "	"	"	46 50	"	"	42 50
" 11.	"	600 "	"	"	36 00	"	"	33 00
" 11½.	"	400 "	"	"	29 00	"	"	26 00
1,000 lb. Grain Dealers'.			"	"	78 00	"	"	73 00
No. 12. Tall Pillar						"	"	23 50
" 12. Short Pillar						"	"	21 50



FAIRBANKS'

PORTABLE PLATFORM WEIGHING MACHINE.

(WITH BAG RACK.)

FAIRBANKS'

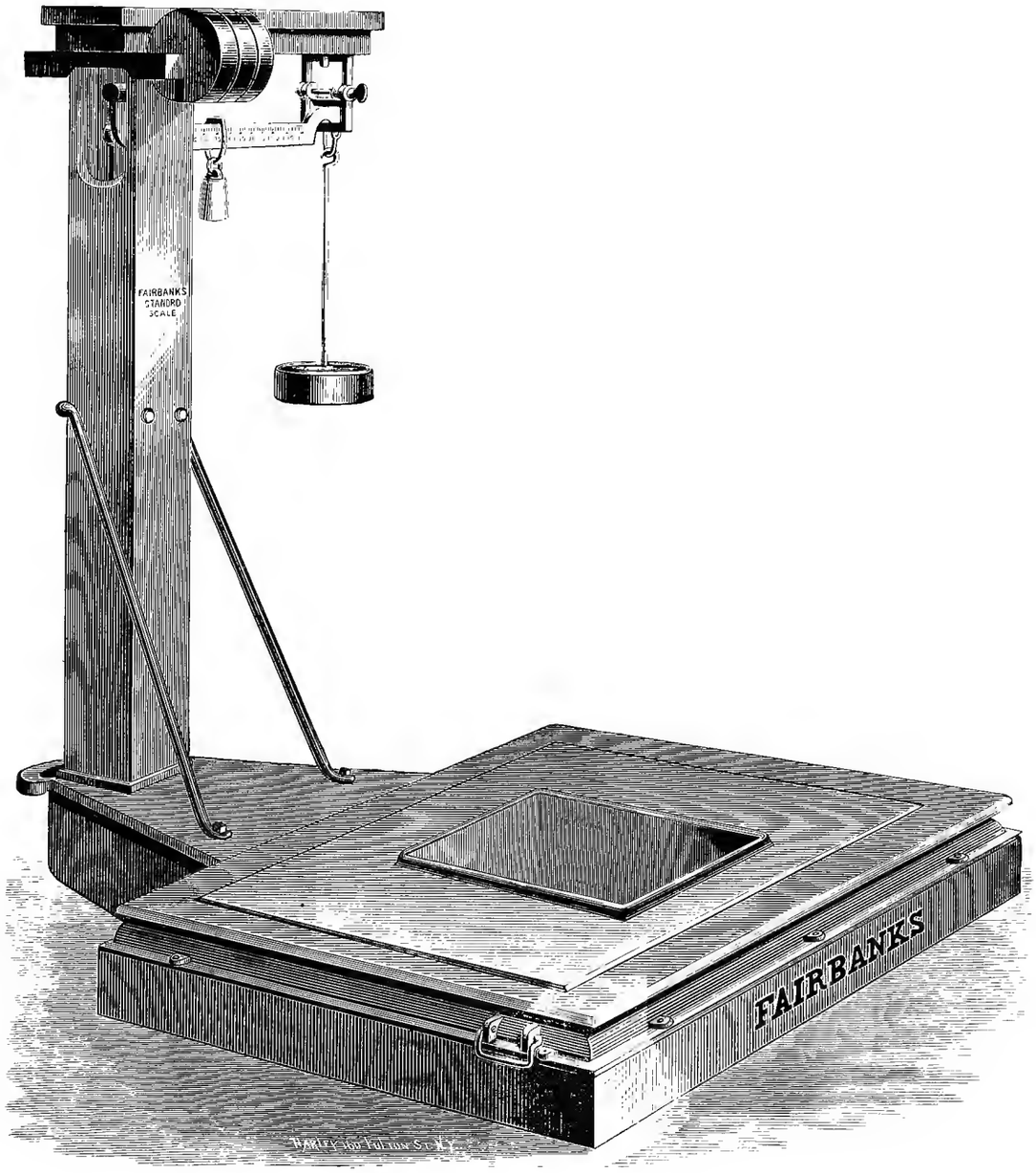
Portable Grain Weighing Machines.

(WITH SINGLE PILLAR.)

Used in Mills, Grain Stores, and Grain Elevators. This machine is invaluable for the purpose to which it is adapted, and is in all respects a labor saving machine. Upon the machine is placed a large "Hopper," of sufficient capacity to hold, in bulk, the amount of grain to be weighed at one draft. The Hopper may be arranged to discharge the grain through the machine to the floor below, or, by means of a trap on the side, the contents may be discharged upon the same floor where it stands.

Capacity of Machine,	40 bushels	Price,	$92 00
" "	30 "	"	84 00

Prices of Machine invariably without Hopper.



FAIRBANKS'

PORTABLE GRAIN WEIGHING MACHINE.

FAIRBANKS'

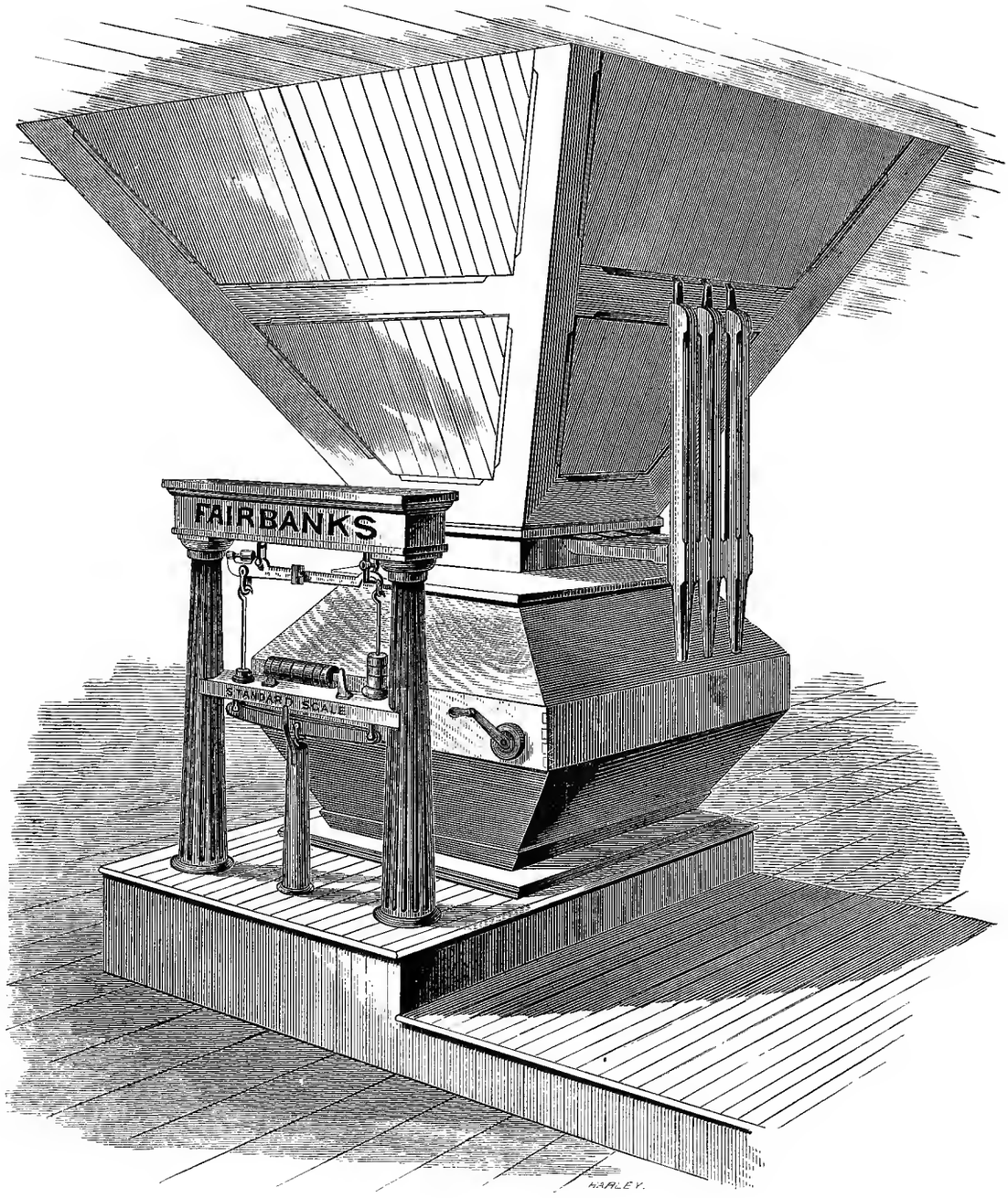
Grain Weighing Machines.

Capacity,	600	Bushels	Price,	$360 00	With Iron Pillars,	Price,	$390 00
"	500	"	"	320 00	"	"	"	"	350 00
"	400	"	"	290 00	"	"	"	"	320 00
"	350	"	"	275 00	"	"	"	"	300 00
"	300	"	"	260 00	"	"	"	"	285 00
"	200	"	"	200 00	"	"	"	"	225 00

Above prices are exclusive of Timber and Hopper, which are to be furnished at purchasers' expense.

The following machines complete, WITHOUT HOPPER.

Capacity,	125	Bushels	Price,	$160 00	With Iron Pillars,	Price,	$180 00
"	100	"	"	140 00	"	"	"	"	160 00
"	60	"	"	105 00	"	"	"	"	125 00
"	40	"	"	Portable pattern					92 00
"	30	"	"	"					84 00



FAIRBANKS'

DORMANT GRAIN WEIGHING MACHINE.

(WITH IRON PILLARS.)

FAIRBANKS'

Cheese Factory Weighing Machines.

WITH DOUBLE BEAM AND SLIDING POISES.

(WITH WHEELS.)

Capacity, 600 lbs.	Platform, 16×25 in.	Price, $37 00
" 1,000 "	" 17×26 "	" 47 00

(WITHOUT WHEELS.)

Capacity, 600 lbs.	Platform, 16×25 in.	Price, $34 00
" 1,000 "	" 17×26 "	" 43 00

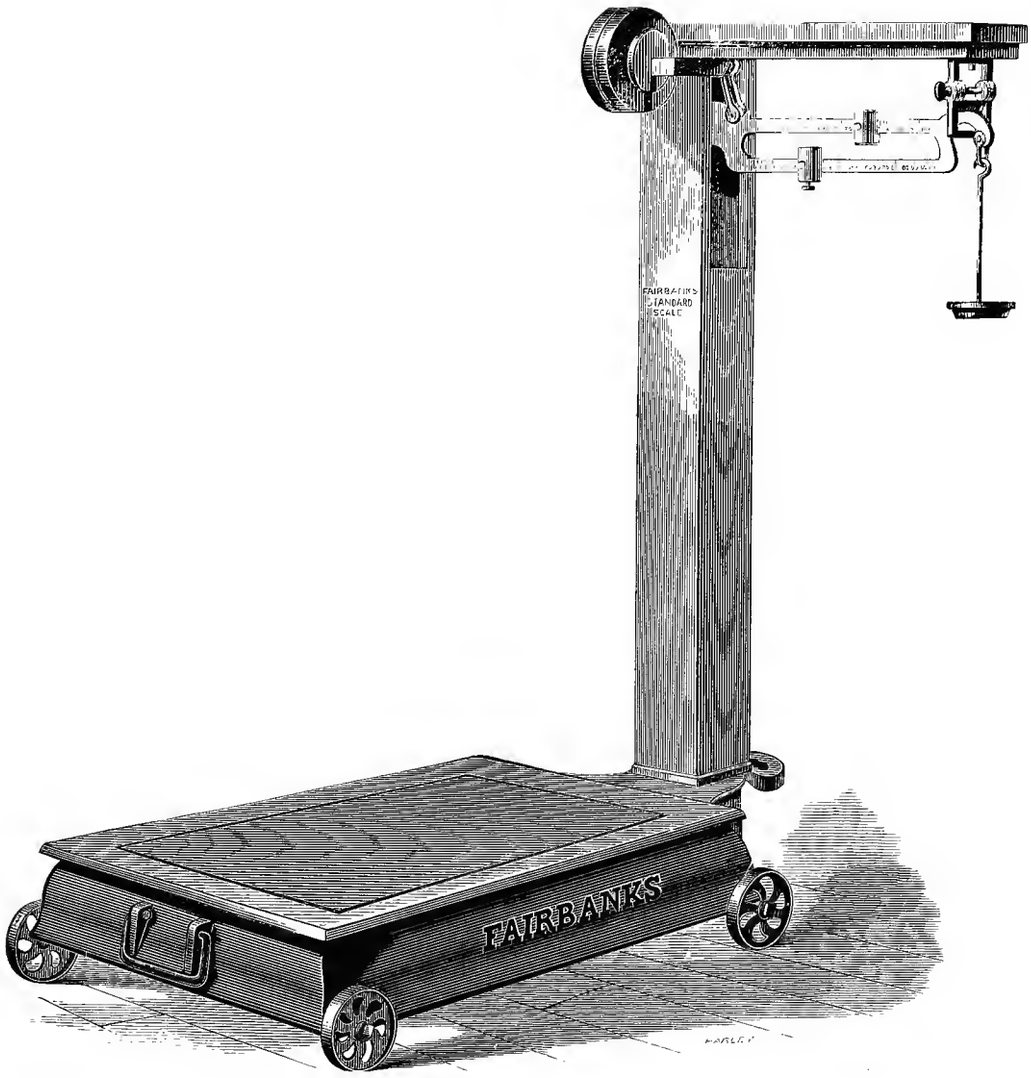
WITH SINGLE 100 LB. BEAM.

(WITH WHEELS.)

Capacity, 600 lbs.	Platform, 16×25 in.	Price, $33 00
" 400 "	" 15×21 "	" 26 00

(WITHOUT WHEELS.)

Capacity, 600 lbs.	Platform, 16×25 in.	Price, $30 00
" 400 "	" 15×21 "	" 23 00



FAIRBANKS'

CHEESE FACTORY WEIGHING MACHINE.

(WITH WHEELS AND DOUBLE BEAM.)

FAIRBANKS'

Cheese Factory Weighing Machines.

WITH SEVEN BEAMS, SLIDING POISES.

(WITH WHEELS.)

Capacity, 1,000 lbs.... Platform, 26×17 in.... Price, $78 00

(WITHOUT WHEELS.)

Capacity, 1,000 lbs.... Platform, 26×17 in.... Price, $74 00

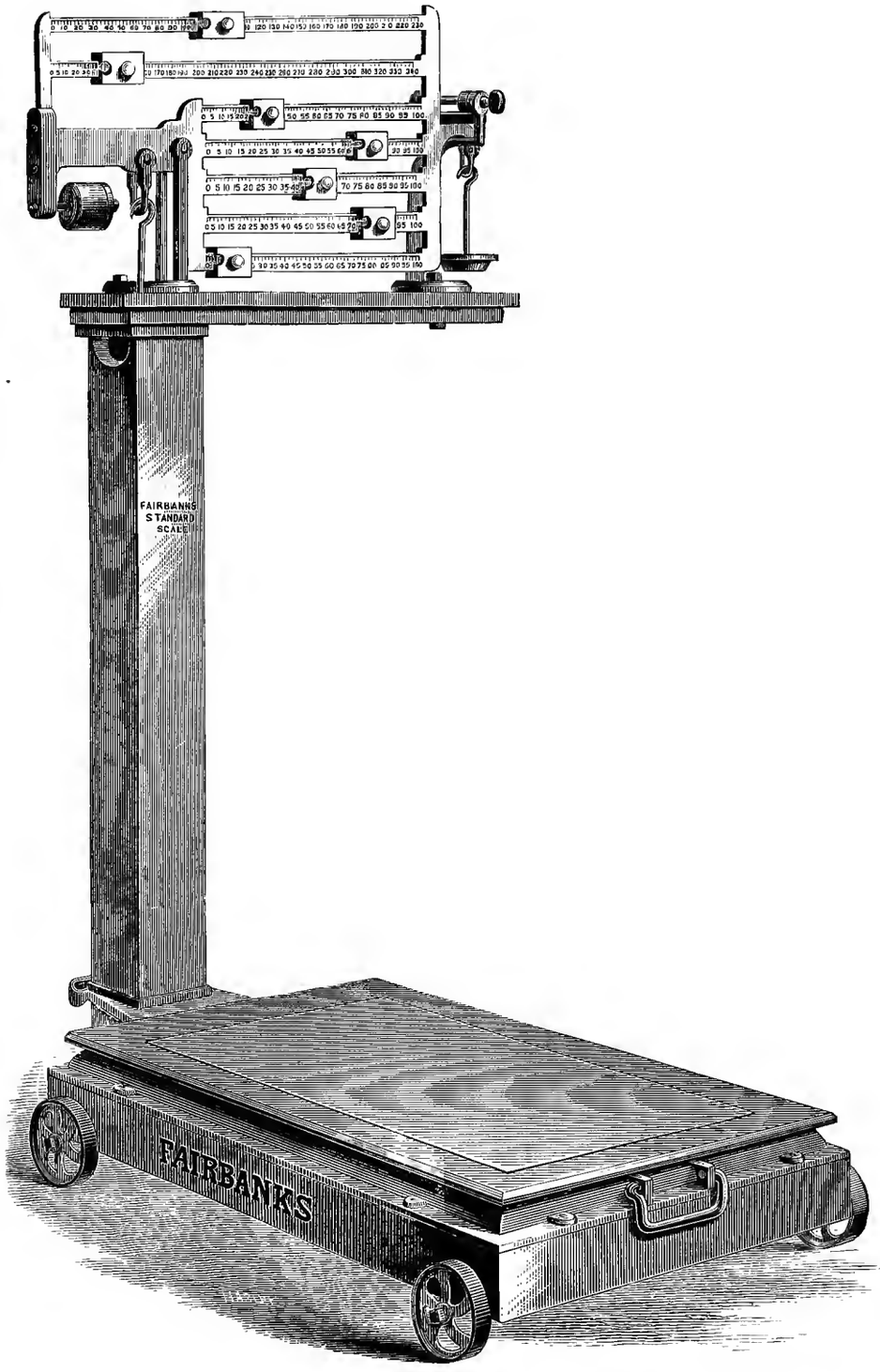
WITH FIVE BEAMS, SLIDING POISES.

(WITH WHEELS.)

Capacity, 600 lbs.... Platform, 25×16 in.... Price, $73 00

(WITHOUT WHEELS.)

Capacity, 600 lbs.... Platform, 25×16 in.... Price, $70 00



FAIRBANKS'
CHEESE FACTORY WEIGHING MACHINE.

(WITH SEVEN BEAMS AND SLIDING POISES.)

FAIRBANKS'

Salt Meat and Fish Weighing Machines.

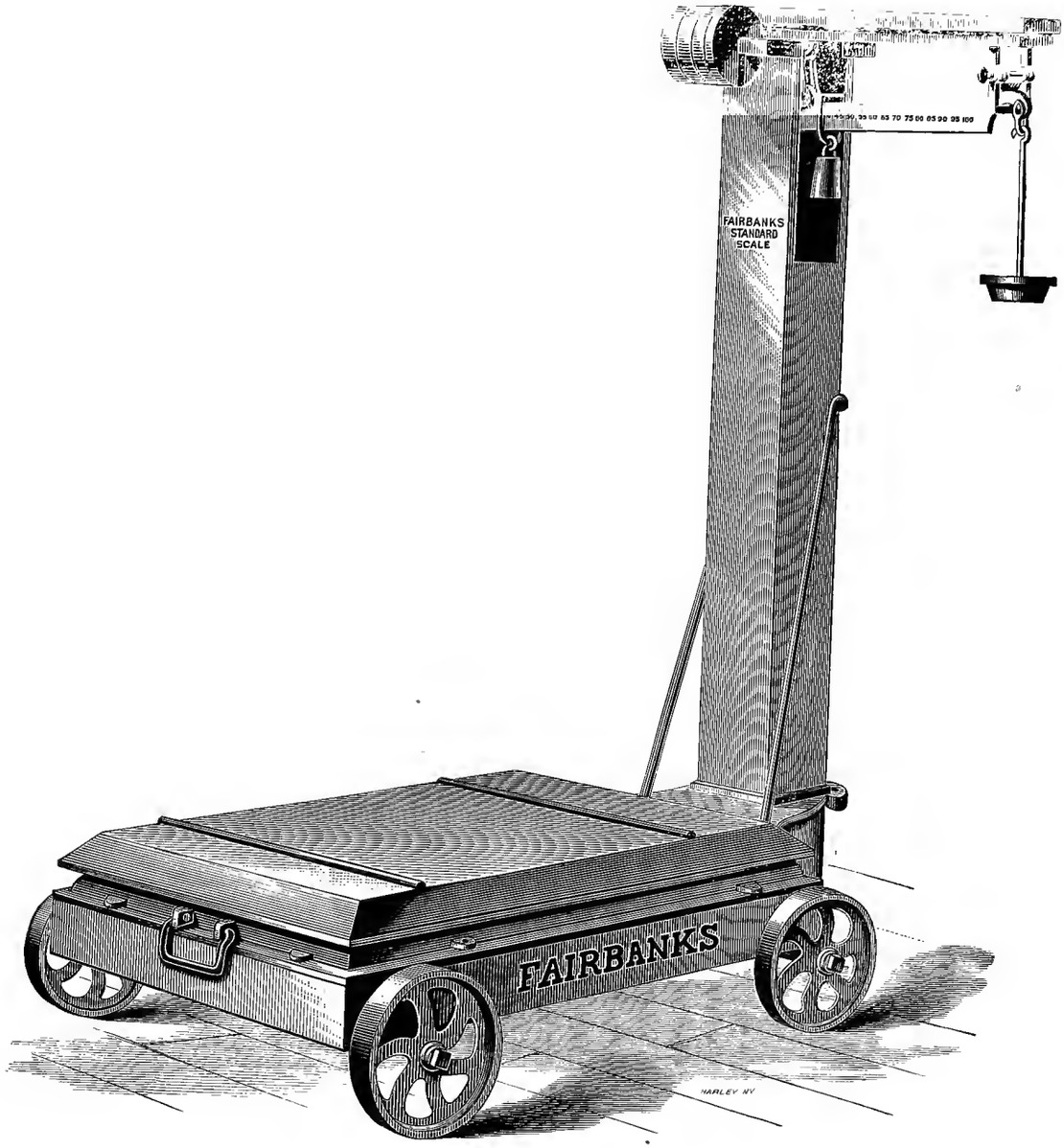
WITH BEVELED EDGE, SOLID IRON PLATFORM.

(WITH WHEELS)

Capacity, 600 lbs	Platform, 16×23 in	Price,	$35 00
" 1,000 "	" 17×26 "	"	48 00
" 1,500 "	" 21×30 "	"	65 00

(WITHOUT WHEELS.)

Capacity, 600 lbs	Platform, 16×23 in	Price,	$32 00
" 1,000 "	" 17×26 "	"	44 00
" 1,500 "	" 21×30 "	"	60 00



FAIRBANKS'

SALT MEAT AND FISH WEIGHING MACHINE.

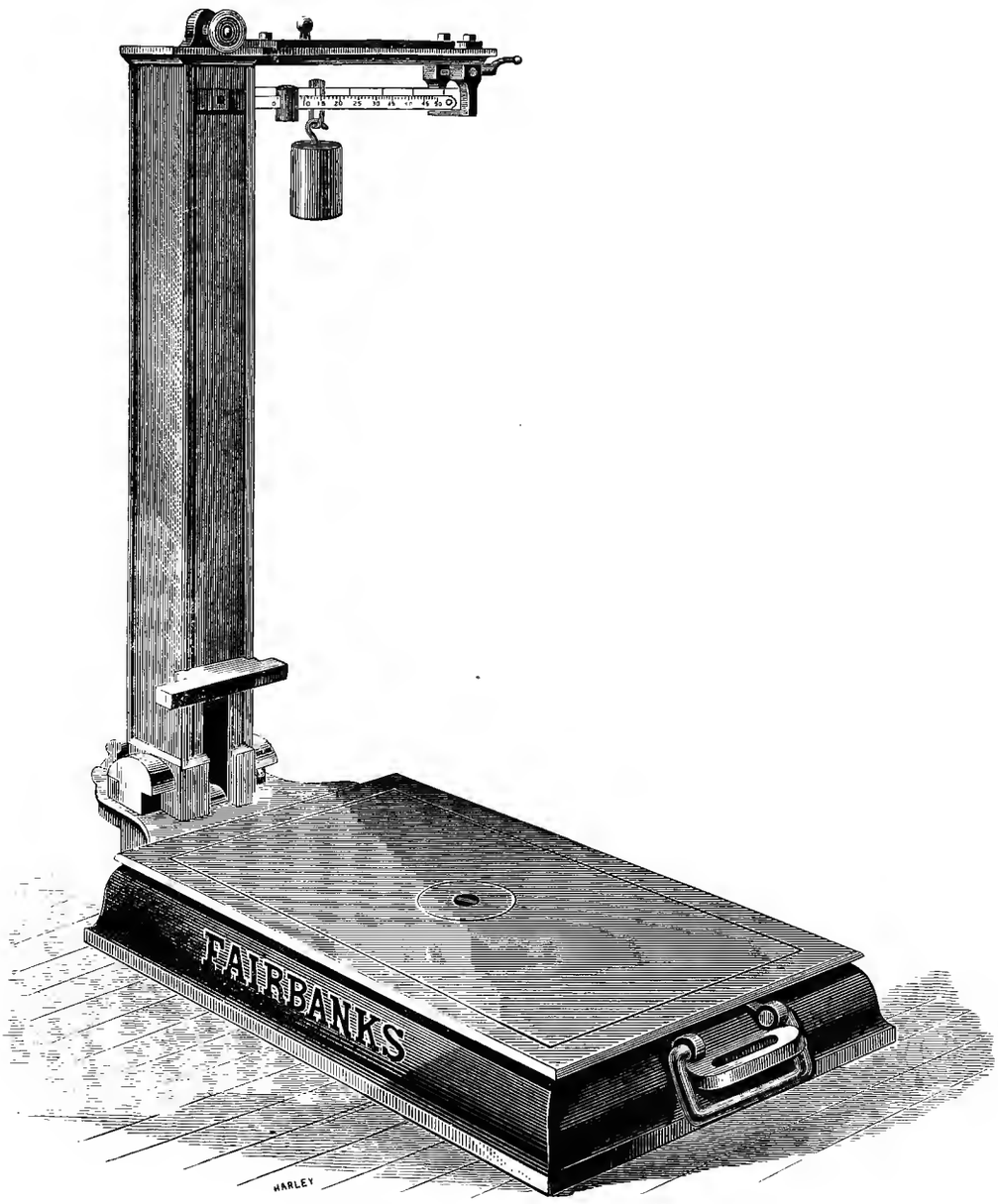
FAIRBANKS'

Commissary or Purser's Weighing Machine.

Cut representing Machine with Beam folded and locked in.

Capacity, 600 lbs. . . . . Platform, 25×16 in. . . . . Price, $52 00

Weighing Machine made all of iron, with double beam and only one weight—beam arranged to fold into the pillar of Weighing Machine, and pillar to fold down upon the platform, making it easy for transportation. Peculiarly adapted for Army and Navy use.



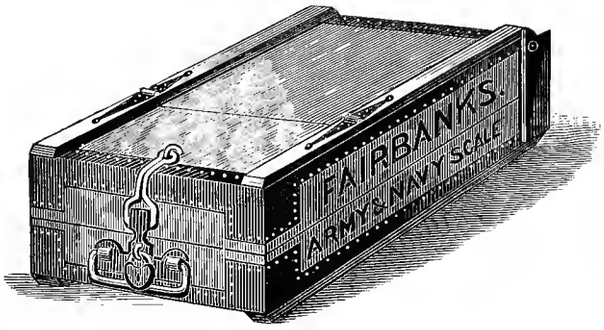
Cut showing Machine in working order.

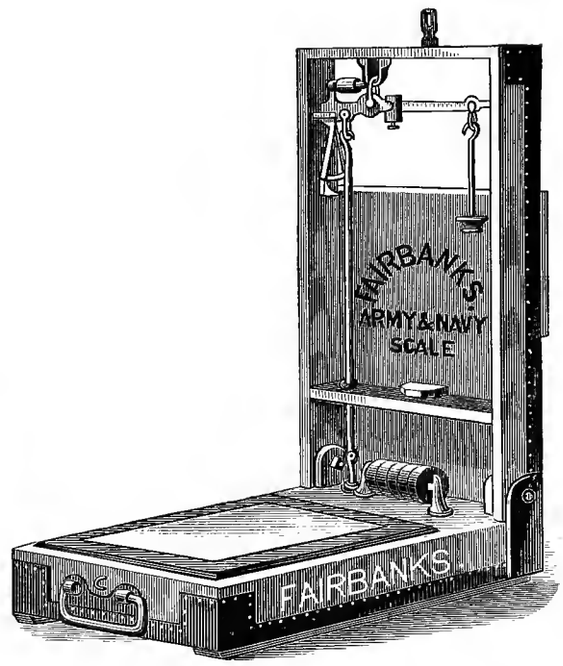
FAIRBANKS'
COMMISSARY OR
PURSER'S WEIGHING MACHINE.

FAIRBANKS'

Army and Navy Weighing Machines.

Capacity,	700 lbs	Platform, 16×25 in	Price, $50 00
"	1,200 "	" 20×28 "	" 58 00





FAIRBANKS'

ARMY AND NAVY WEIGHING MACHINE.

FAIRBANKS'

Portable Freight Weighing Machines.

No. 7	Capacity, 2,500 lbs	Platform, 23×30 in	Price, $110 00
" 8	" 2,000 "	" 23×30 "	" 98 00

FAIRBANKS'

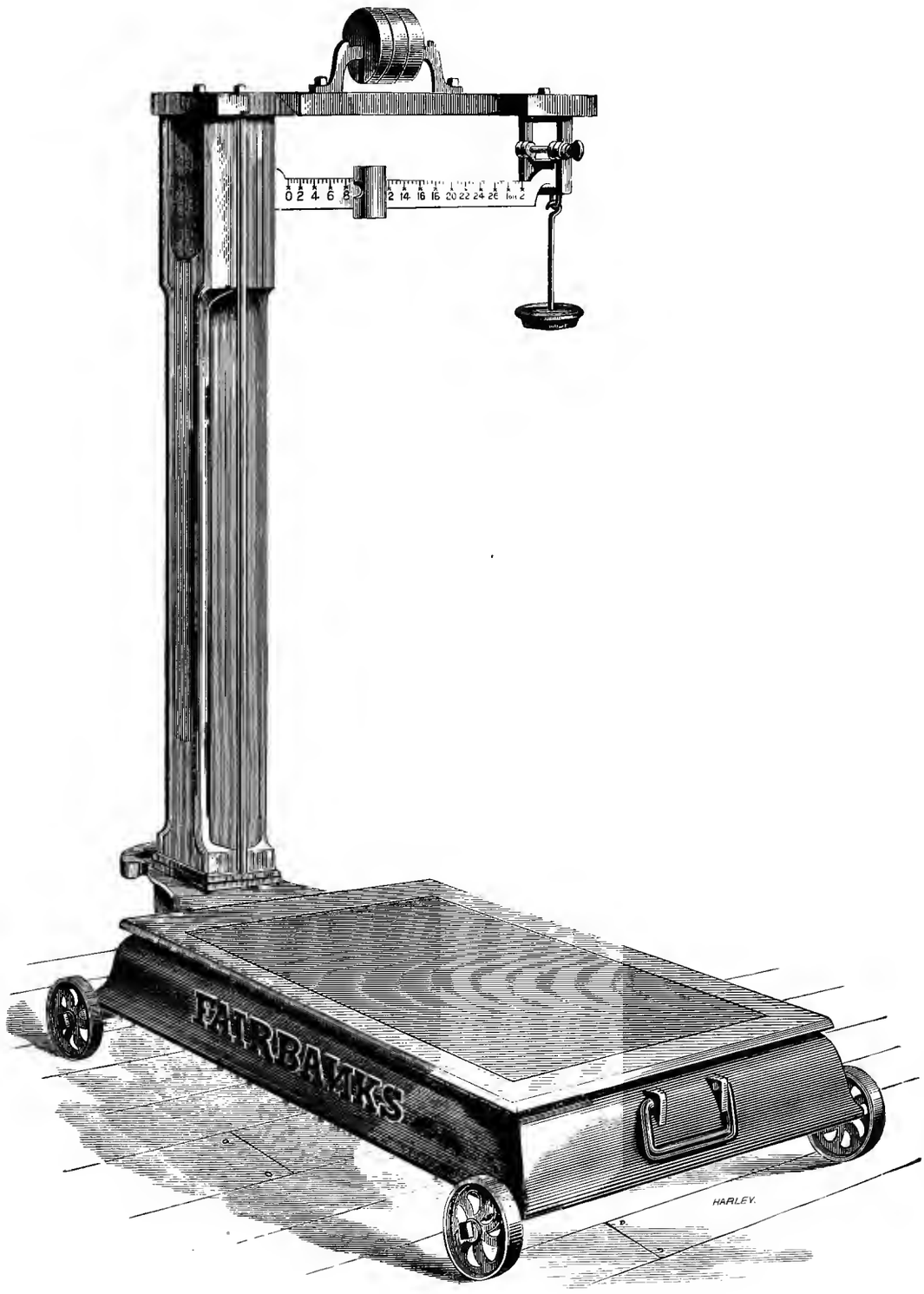
PORTABLE FREIGHT WEIGHING MACHINE.

FAIRBANKS'

Portable Platform Weighing Machines.

(MACHINE CONSTRUCTED ENTIRELY OF METAL.)

No.	7.	Capacity,	2,000	lbs.	With	Wheels	$85	00	Without	Wheels		$80	00
"	8.	"	1,600	"	"	"	73	50	"	"		68	50
"	9.	"	1,400	"	"	"	63	50	"	"		59	50
"	10.	"	1,200	"	"	"	56	00	"	"		52	00
"	10½.	"	900	"	"	"	49	50	"	"		45	50
"	11.	"	600	"	"	"	39	00	"	"		36	00
"	11½.	"	400	"	"	"	31	00	"	"		28	00



FAIRBANKS'

PORTABLE PLATFORM WEIGHING MACHINE.

(MACHINE CONSTRUCTED ENTIRELY OF METAL.)

FAIRBANKS'

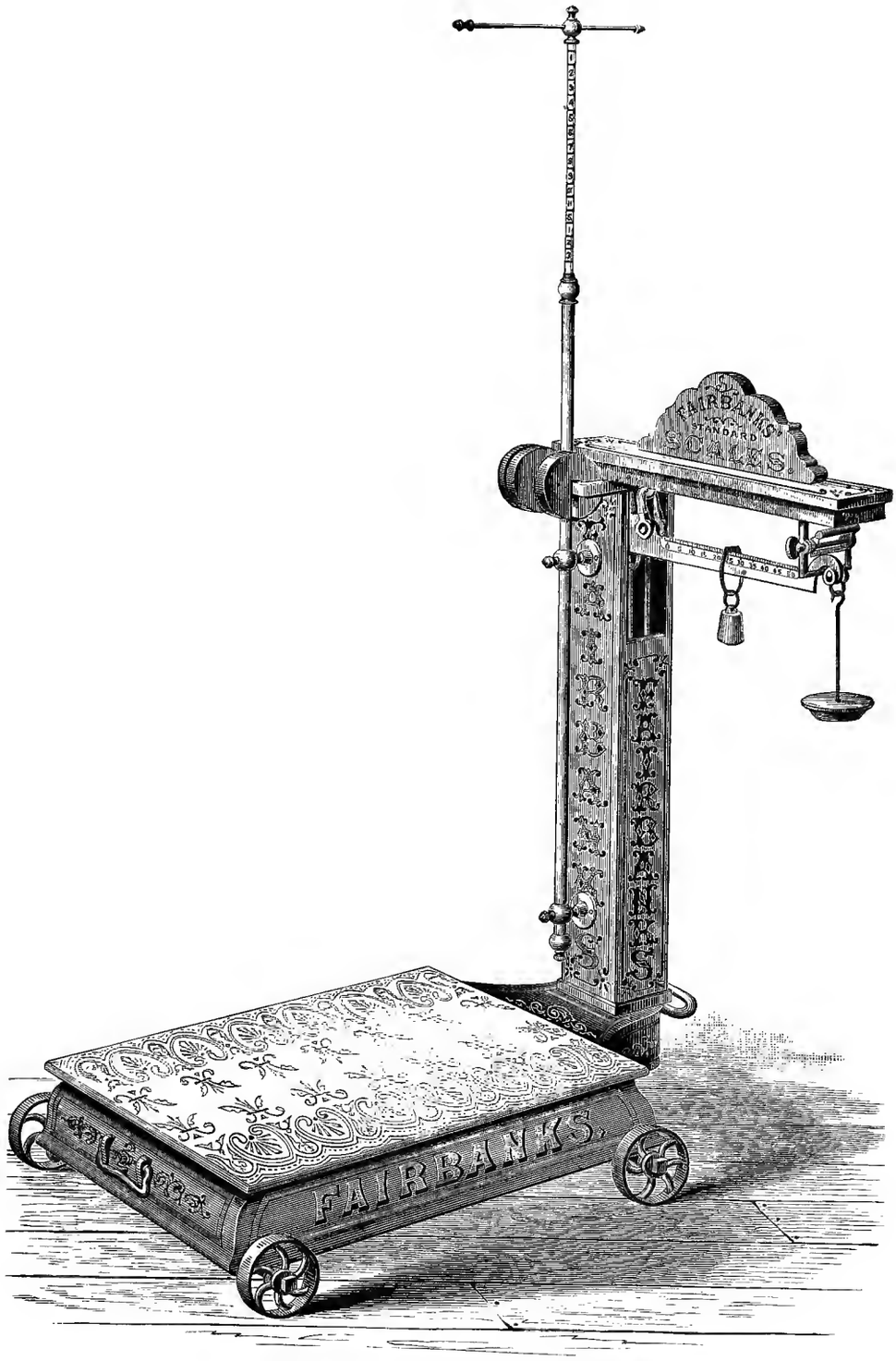
Portable Weighing and Measuring Machine.

(EXTRA FINISH.)

For Weighing, and Measuring the Height of People.

For use in Hotels, Life Insurance Offices, Gymnasiums and Recruiting Offices.

Furnished to Order ..... Price $50.00 and upwards.



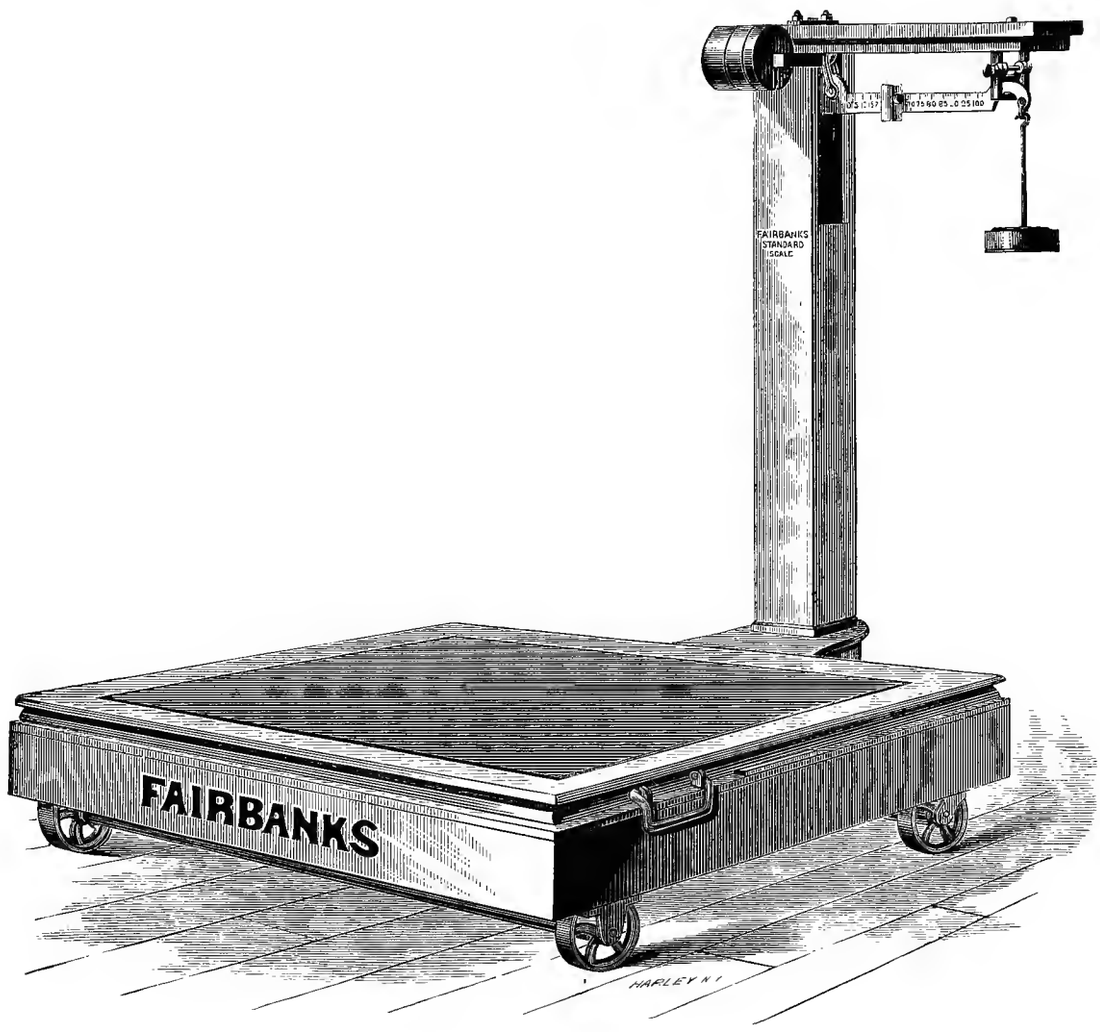
FAIRBANKS'
PORTABLE
WEIGHING AND MEASURING MACHINE.

(EXTRA FINISH.)

FAIRBANKS'

Wool Weighing Machine.

Capacity, 1,000 lbs. . . . . Platform, 34×44 in. . . . . Price, $95 00



FAIRBANKS'

WOOL WEIGHING MACHINE.

FAIRBANKS'

Portable Platform Weighing Machines.

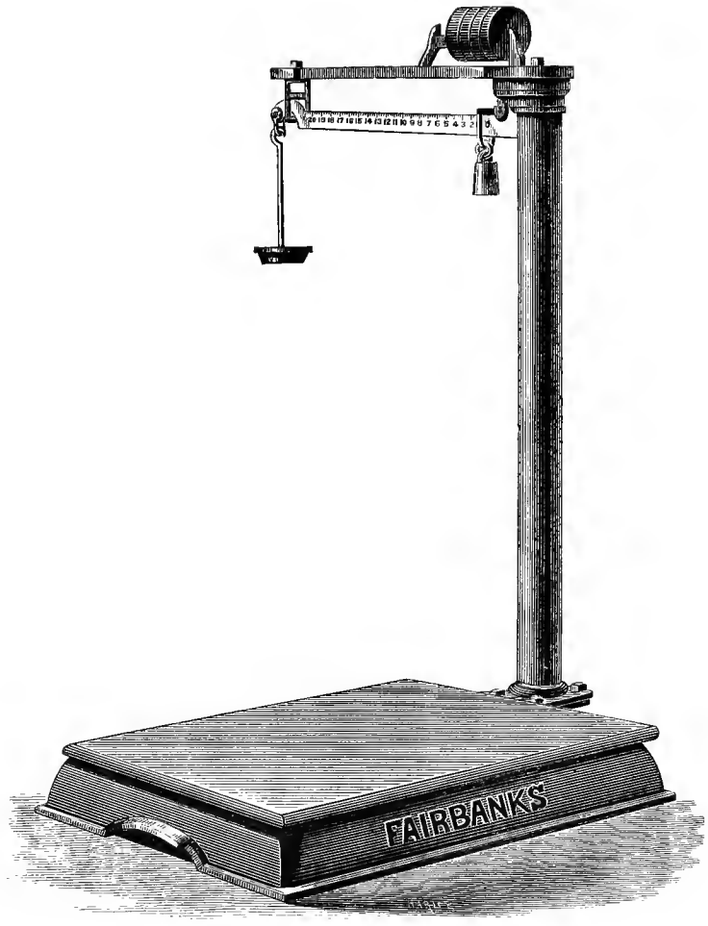
No. 12.

(WITH TALL IRON PILLAR.)

Capacity, 240 lbs. ..... Platform, 13×19 inches. .. Price, $21 00

(WITH TALL WOOD PILLAR.)

Capacity, 300 lbs. ..... Platform, 13×19 inches. ..... Price, $22 00



FAIRBANKS'

PORTABLE PLATFORM WEIGHING MACHINE.

No. 12.

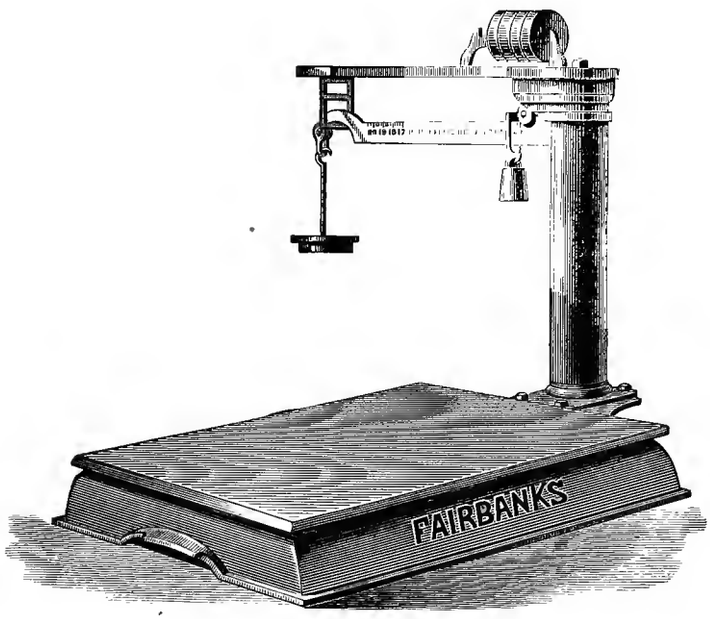
FAIRBANKS'

Platform Counter Weighing Machine.

No. 12.

(WITH SHORT IRON PILLAR.)

Capacity, 240 lbs.... .....Platform, 13×19 in. .. .. ..Price, $19 00



FAIRBANKS'

PLATFORM COUNTER WEIGHING MACHINE.

No. 12.

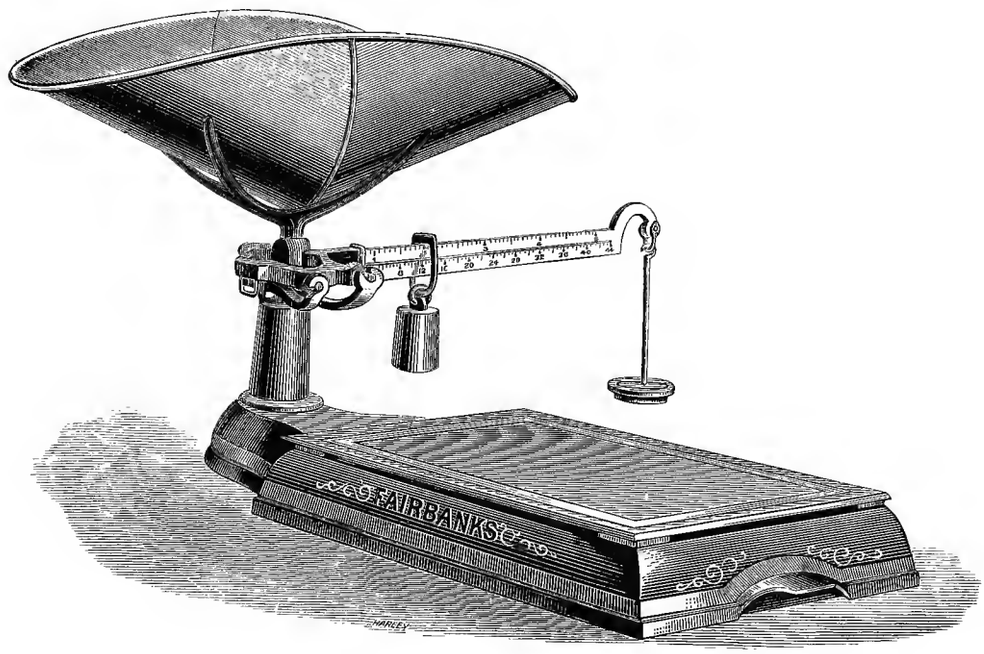
(WITH SHORT PILLAR.)

FAIRBANKS'

Union or Family Weighing Machines.

Capacity, ½ oz. to 240 lbs. Platform 10×13½ inches.

Price, with Tin Scoop	$14 00
" " Brass Scoop	15 00



FAIRBANKS'

UNION OR FAMILY WEIGHING MACHINE.

FAIRBANKS'

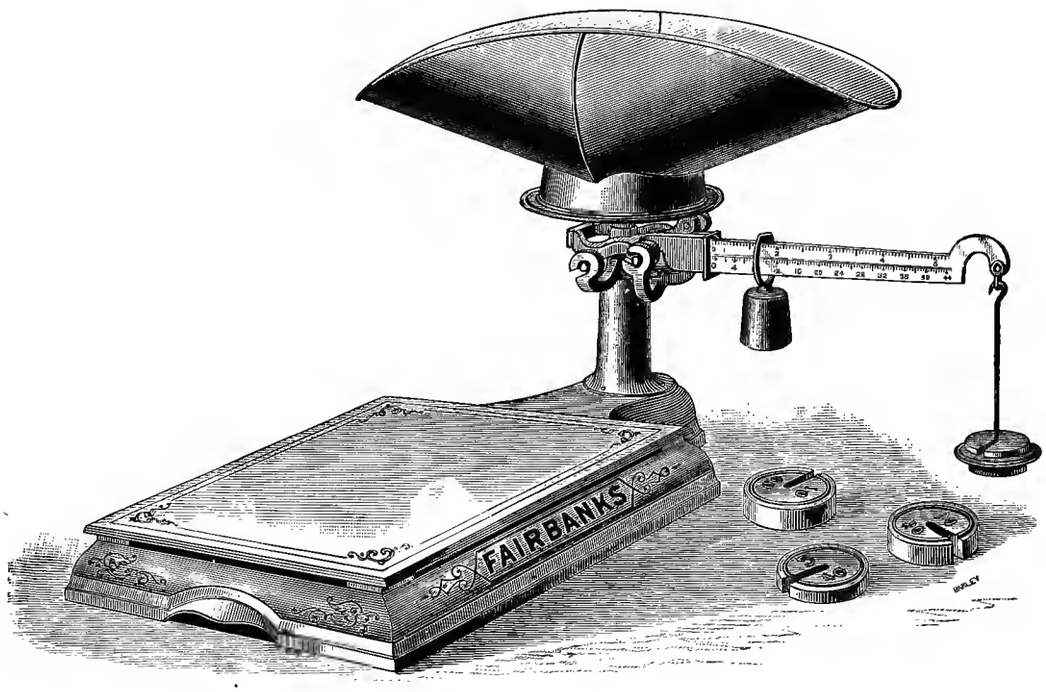
Union or Family Weighing Machine.

(WITH TWO PLATFORMS.)

Capacity ½ oz. to 240 lbs. Platform 10×13½ in.

Price, with Tin Scoop	$14 50
Price, with Brass Scoop	15 50

Extra for Double Beam, $1.00



FAIRBANKS'

UNION OR FAMILY WEIGHING MACHINE.

(WITH TWO PLATFORMS.)

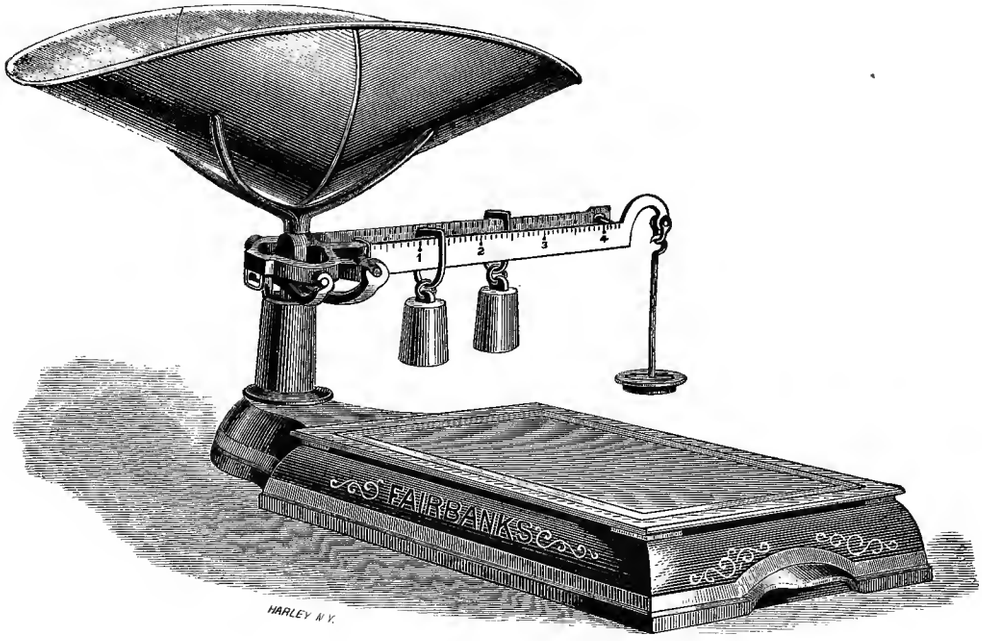
FAIRBANKS'

Union or Family Weighing Machines.

(WITH DOUBLE BEAM.)

Capacity ½ oz. to 240 lbs. Platform 10×13½ inches.

Price with Tin Scoop	$15 00
" " Brass Scoop	16 00



FAIRBANKS'

UNION OR FAMILY WEIGHING MACHINE.

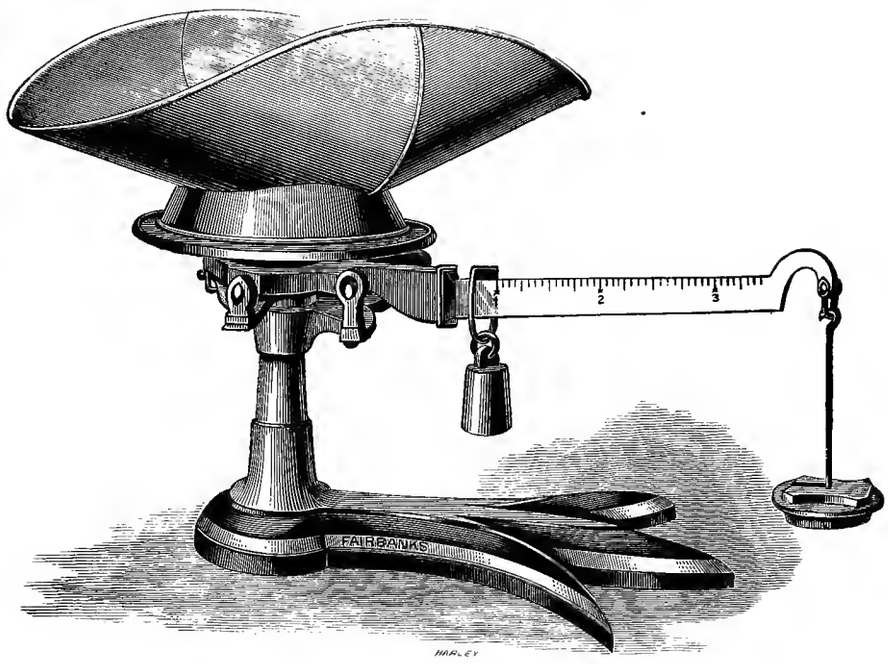
(WITH DOUBLE BEAM.)

FAIRBANKS'

Grocers' Weighing Machines.

Capacity ½ oz. to 62 lbs.

Price, with Tin Scoop	$12 00
" " Brass Scoop	13 50



FAIRBANKS'

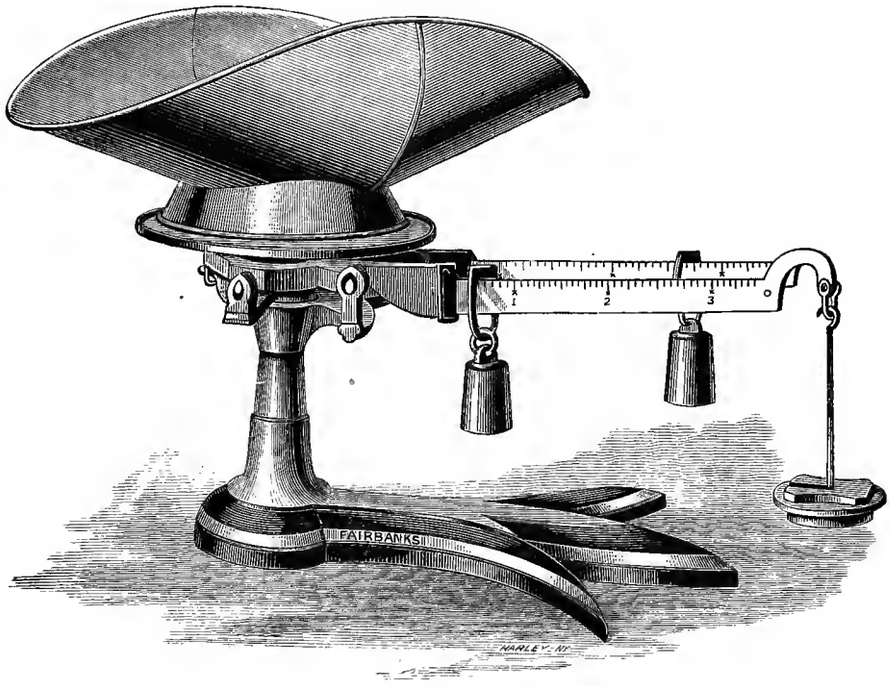
GROCERS' WEIGHING MACHINE.

FAIRBANKS'

Grocers' Weighing Machines.

(WITH DOUBLE BEAM.)

Price with Tin Scoop	$13 00
" " Brass Scoop	14 50



FAIRBANKS'

GROCERS' WEIGHING MACHINE.

(WITH DOUBLE BEAM.)

FAIRBANKS'

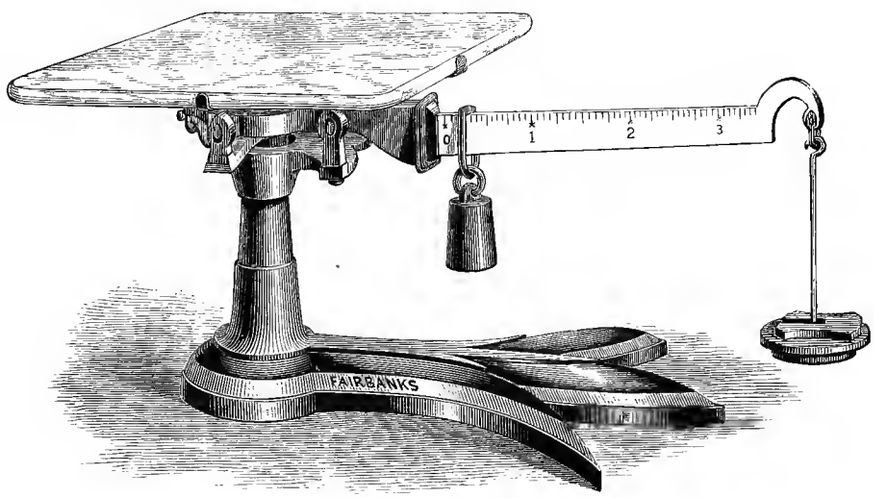
Grocers' Weighing Machines.

(WITH PORCELAIN PLATE.)

Capacity, ½ oz. to 62 lbs.

Square	Porcelain	Plate,	Single	Beam...	Price,	$12 50	With	Tin	Scoop...	Price,	$14 00
"	"	"	Double	"	"	13 50	"	"	"	"	15 00
Round	Porcelain	Plate,	Single	Beam...	"	12 00	"	"	"	"	13 50
"	"	"	Double	"	"	13 00	"	"	"	"	14 50

Price with Brass Scoop, extra, $1.50.



FAIRBANKS'

GROCERS' WEIGHING MACHINE.

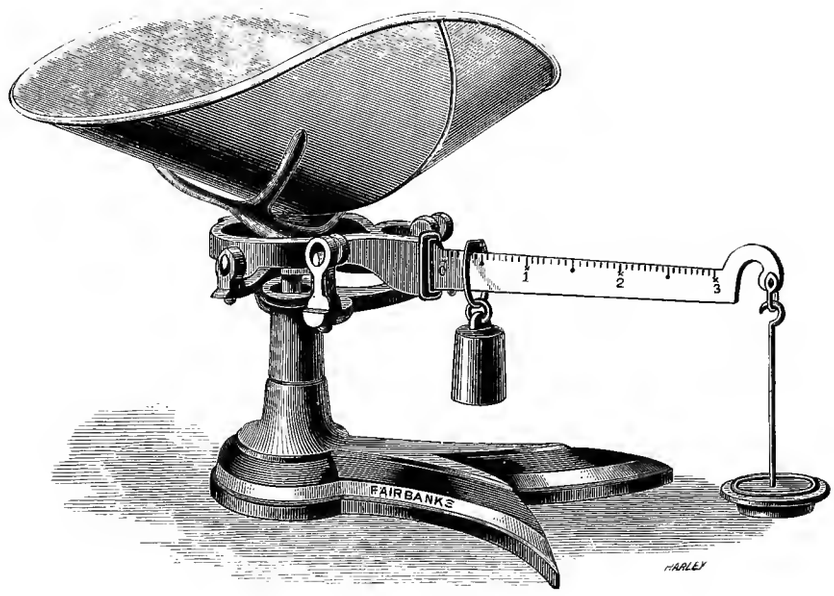
(WITH PORCELAIN PLATE.)

FAIRBANKS'

Counter Weighing Machines.

Capacity, ½ oz. to 36 lbs.

Price, with Tin Scoop	$10 00
" " Brass Scoop	11 50



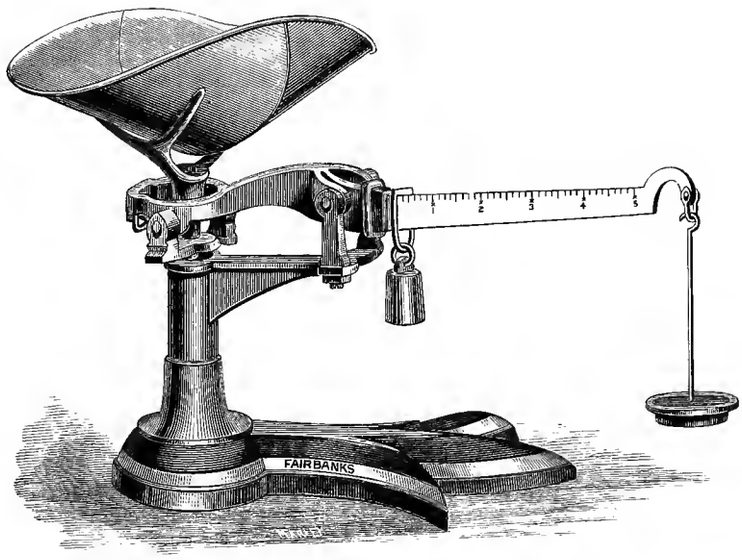
FAIRBANKS'

COUNTER WEIGHING MACHINE.

FAIRBANKS'

Druggists' Weighing Machines.

Capacity, $\frac{1}{16}$ of an ounce to 8 lbs.	Tin Scoop.	Price, $10 00
" " " " "	Brass Scoop.	" 11 00



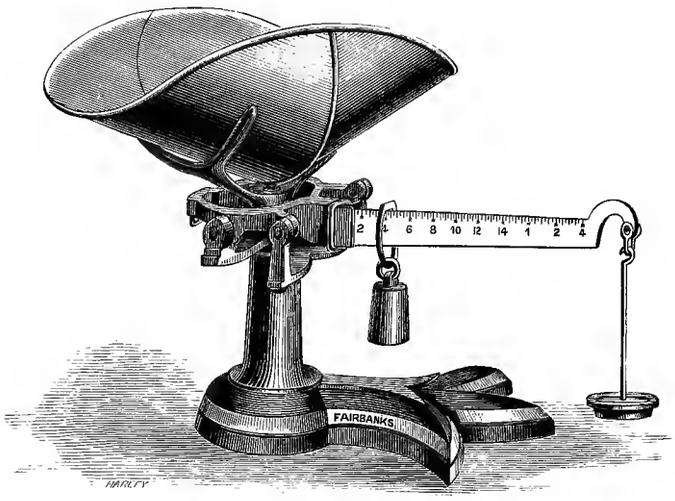
FAIRBANKS'

DRUGGISTS' WEIGHING MACHINE.

FAIRBANKS'

Tea Weighing Machines.

Capacity, 8 lbs.	With Tin Scoop	Price, $8 00
" 8 "	With Brass Scoop	" 9 00



FAIRBANKS'

TEA WEIGHING MACHINE.

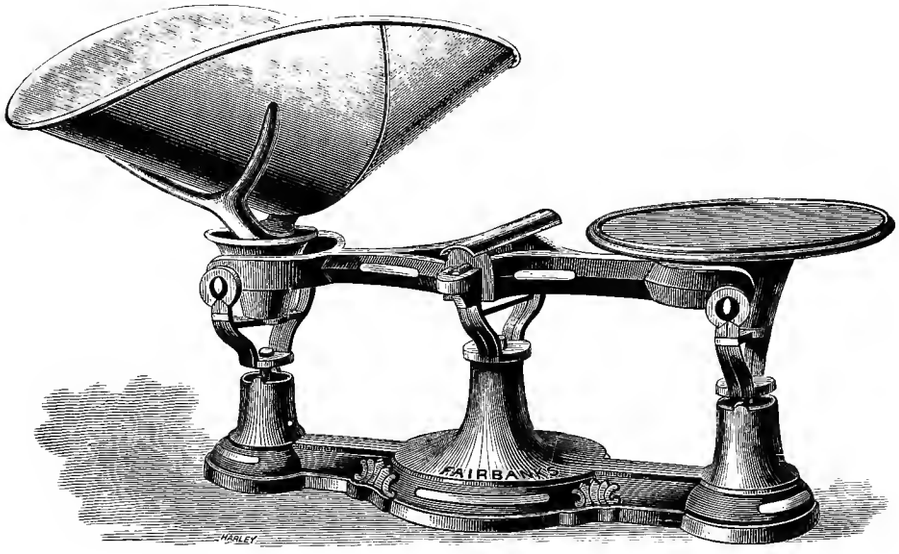
FAIRBANKS'

Grocers' Even Balance Trip Scales.

(WITH SCOOP AND PLATE FOR WEIGHTS.)

Prices Without Weights.

No. 1.	Tin Scoop and Iron Plate	Price, $9 00
" 2.	" " " "	" 7 00
" 3.	" " " "	" 5 50
" 4.	" " " "	" 4 50
No. 1.	Brass Scoop and Iron Plate	" 10 50
" 2.	" " " "	" 8 00
" 3.	" " " "	" 6 50
" 4.	" " " "	" 5 50
No. 1.	Brass Scoop and Brass Plate	" 12 50
" 2.	" " " "	" 9 75
" 3.	" " " "	" 8 00
" 4.	" " " "	" 6 50



FAIRBANKS'

GROCERS' EVEN BALANCE TRIP SCALE.

(WITH SCOOP AND PLATE FOR WEIGHTS.)

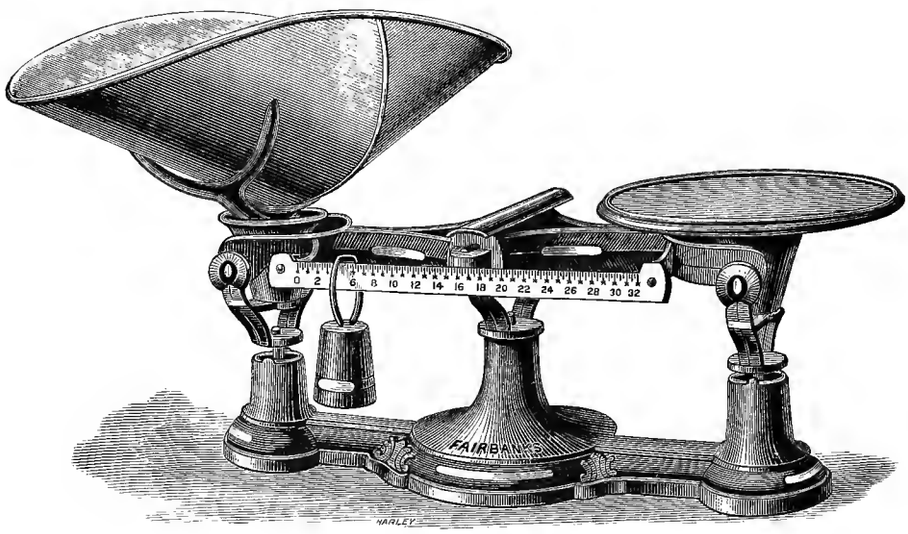
FAIRBANKS'

Grocers' Even Balance Trip Scales.

(WITH SCOOP AND PLATE FOR WEIGHTS AND SIDE BEAM.

Prices Without Weights.

No. 1.	Tin Scoop and Iron Plate and Side Beam	Price,	$11 00
" 2.	" " " " " "	"	8 75
" 3.	" " " " " "	"	7 00
" 4.	" " " " " "	"	5 50
No. 1.	Brass Scoop and Iron Plate and Side Beam	"	12 50
" 2.	" " " " " "	"	9 75
" 3.	" " " " " "	"	8 00
" 4.	" " " " " "	"	6 50
No. 1.	Brass Scoop and Brass Plate and Side Beam	"	14 50
" 2.	" " " " " "	"	11 50
" 3.	" " " " " "	"	9 50
" 4.	" " " " " "	"	7 50



FAIRBANKS'

GROCERS' EVEN BALANCE TRIP SCALE.

(WITH SCOOP AND PLATE FOR WEIGHTS, AND SIDE BEAM.)

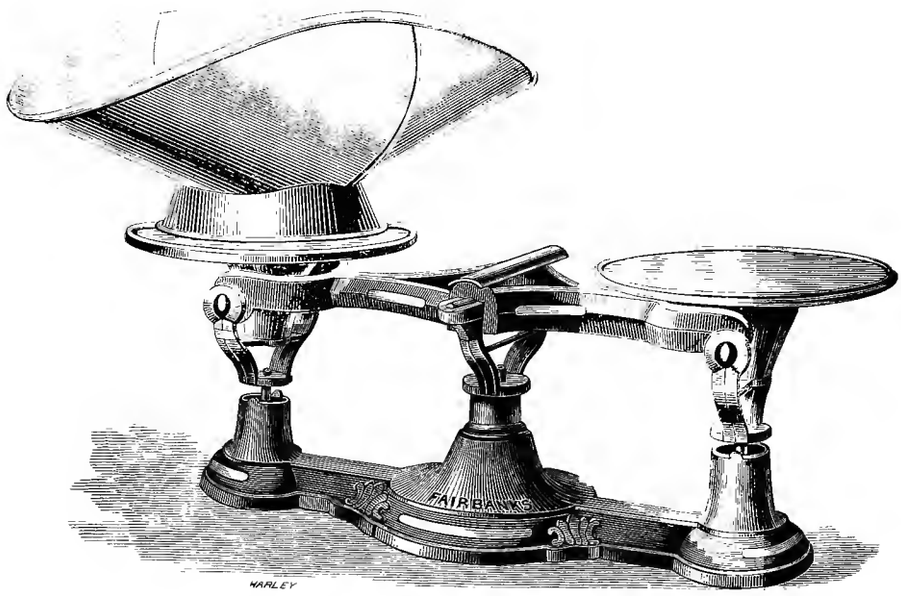
FAIRBANKS'

Grocers' Even Balance Trip Scales.

(WITH TWO PLATES AND SCOOP WITH BALANCE WEIGHT.)

Prices Without Weights.

No. 1.	Tin	Scoop	and	Two	Iron	Plates	$10 00	With	Side	Beam		$12 00
" 2.	"	"	"	"	"		8 00	"	"	"		9 75
" 3.	"	"	"	"	"		6 50	"	"	"		8 00
" 4.	"	"	"	"	"		5 50	"	"	"		6 50
No. 1.	Brass	Scoop	and	Two	Iron	Plates	11 50	With	Side	Beam		13 50
" 2.	"	"	"	"	"		9 00	"	"	"		10 75
" 3.	"	"	"	"	"		7 50	"	"	"		9 00
" 4.	"	"	"	"	"		6 50	"	"	"		7 50
No. 1.	Tin	Funnel	Scoop	and	Two	Iron Plates	11 50	With	Side	Beam		13 50
" 2.	"	"	"	"	"	"	9 50	"	"	"		11 25
" 3.	"	"	"	"	"	"	7 50	"	"	"		9 00
" 4.	"	"	"	"	"	"	6 50	"	"	"		7 50
No. 1.	Brass	Funnel	Scoop	and	Two	Iron Plates	13 00	With	Side	Beam		15 00
" 2.	"	"	"	"	"	"	10 50	"	"	"		12 25
" 3.	"	"	"	"	"	"	8 50	"	"	"		10 00
" 4.	"	"	"	"	"	"	7 50	"	"	"		8 50
No. 1.	Two	Iron	Plates,	Without	Scoop		9 00	With	Side	Beam		11 00
" 2.	"	"	"	"	"		7 00	"	"	"		8 75
" 3.	"	"	"	"	"		5 50	"	"	"		7 00
" 4.	"	"	"	"	"		4 50	"	"	"		5 50



FAIRBANKS'

GROCERS' EVEN BALANCE TRIP SCALE.

(WITH TWO PLATES AND SCOOP WITH BALANCE WEIGHT.)

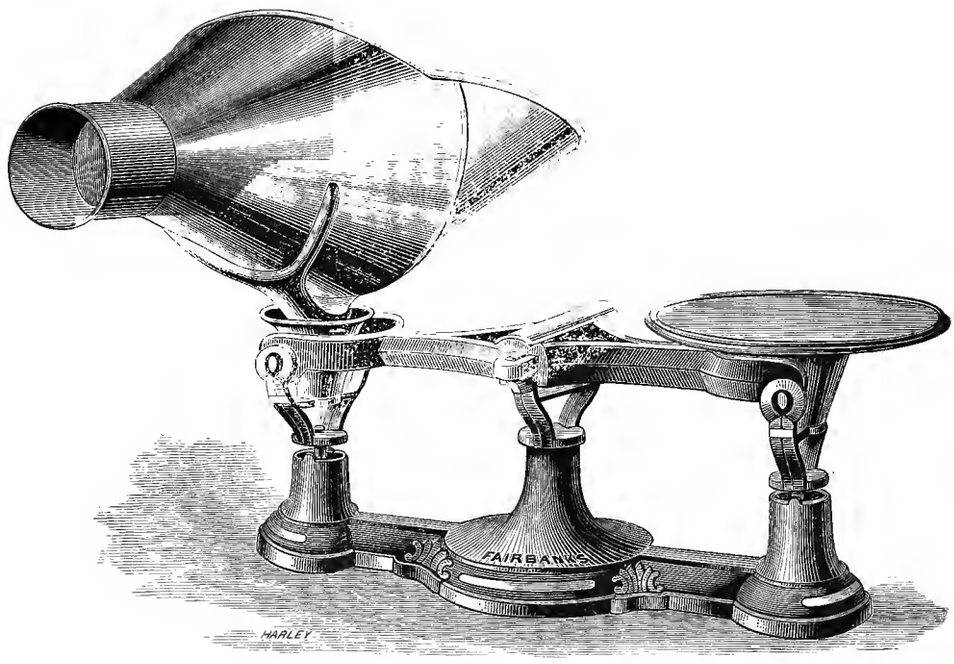
FAIRBANKS'

Grocers' Even Balance Trip Scales.

(WITH FUNNEL SCOOP AND PLATE FOR WEIGHTS.)

Prices Without Weights.

No. 1.	Tin	Funnel	Scoop	and	Iron	Plate	$10 50	With	Side	Beam	$12 50
" 2.	"	"	"	"	"		8 50	"	"	"	10 25
" 3.	"	"	"	"	"		6 50	"	"	"	8 00
" 4.	"	"	"	"	"		5 50	"	"	"	6 50
No. 1.	Brass	Funnel	Scoop	and	Iron	Plate	12 00	With	Side	Beam	14 00
" 2.	"	"	"	"	"		9 50	"	"	"	11 25
" 3.	"	"	"	"	"		7 50	"	"	"	9 00
" 4.	"	"	"	"	"		6 50	"	"	"	7 50
No. 1.	Brass	Funnel	Scoop	and	Brass	Plate	14 00	With	Side	Beam	16 00
" 2.	"	"	"	"	"		11 25	"	"	"	13 00
" 3.	"	"	"	"	"		9 00	"	"	"	10 50
" 4.	"	"	"	"	"		7 50	"	"	"	8 50



FAIRBANKS'

GROCERS' EVEN BALANCE TRIP SCALE.

(WITH FUNNEL SCOOP AND PLATE FOR WEIGHTS.)

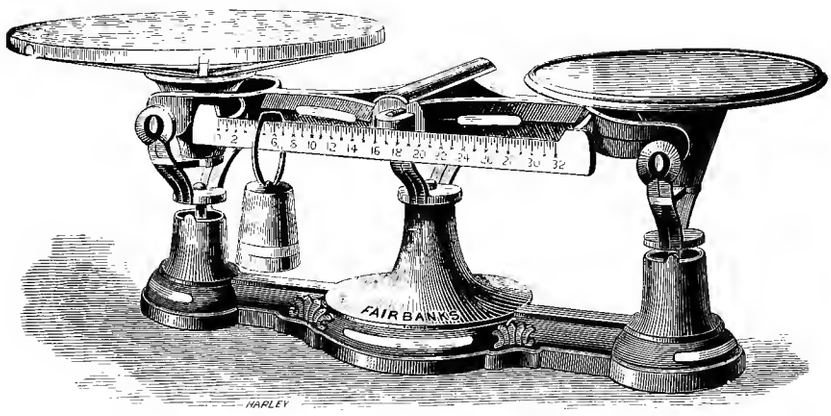
FAIRBANKS'

Butter Trip Scales.

(WITH BRASS SIDE BEAM.)

Prices Without Weights.

No. 1.	Porcelain Plate and Iron Plate	Price,	$12 50
" 2.	" " " "	"	9 75
" 3.	" " " "	"	8 00
" 4.	" " " "	"	6 50
No 1.	Porcelain Plate and Brass Plate	"	14 50
" 2.	" " " "	"	11 50
" 3.	" " " "	"	9 50
" 4.	" " " "	"	7 50
No. 1.	Brass Plate and Iron Plate	"	12 50
" 2.	" " " "	"	9 75
" 3.	" " " "	"	8 00
" 4.	" " " "	"	6 50
No. 1.	Two Brass Plates	"	14 50
" 2.	" " "	"	11 50
" 3.	" " "	"	9 50
" 4.	" " "	"	7 50
No. 1.	Two Iron Plates	"	11 00
" 2.	" " "	"	8 75
" 3.	" " "	"	7 00
" 4.	" " "	"	5 50



FAIRBANKS'

BUTTER TRIP SCALE.

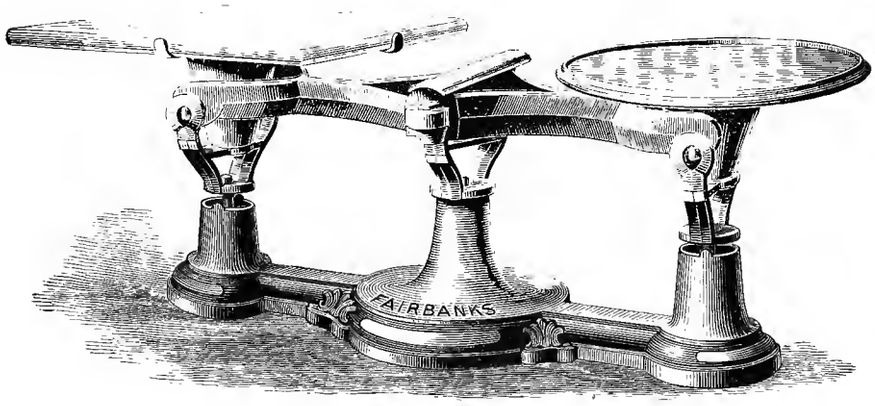
(WITH BRASS SIDE BEAM.)

FAIRBANKS'

Butchers' Even Balance Trip Scales.

Prices Without Weights.

No. 1.	Square Porcelain Plate and Iron Plate	Price,	$11 00
" 2.	" " " " "	"	8 50
" 3.	" " " " "	"	6 75
" 4.	" " " " "	"	5 75
No. 1.	Square Porcelain Plate and Brass Plate	"	13 00
" 2.	" " " " "	"	10 25
" 3.	" " " " "	"	8 25
" 4.	" " " " "	"	6 75
No. 1.	Round Porcelain Plate and Iron Plate	"	10 50
" 2.	" " " " "	"	8 00
" 3.	" " " " "	"	6 50
" 4.	" " " " "	"	5 50



FAIRBANKS'

BUTCHERS' EVEN BALANCE TRIP SCALE.

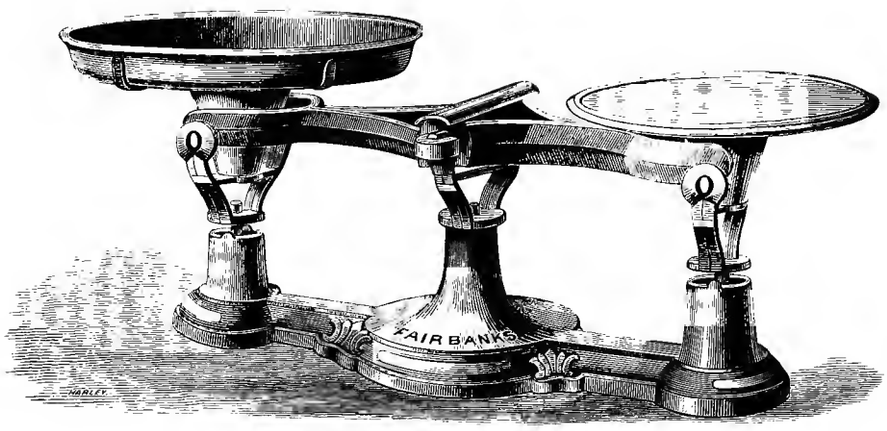
FAIRBANKS'

Druggists' Even Balance Trip Scales.

(WITH PAN AND PLATE FOR WEIGHTS.)

Prices Without Weights.

No. 1.	Brass Pan and Iron Plate	Price, $10 50
" 2.	" " " "	" 8 00
" 3.	" " " "	" 6 50
" 4.	" " " "	" 5 50
No. 1.	Brass Pan and Brass Plate	" 12 50
" 2.	" " " "	" 9 75
" 3.	" " " "	" 8 00
" 4.	" " " "	" 6 50
No. 1.	Porcelain Plate and Iron Plate	" 10 50
" 2.	" " " "	" 8 00
" 3.	" " " "	" 6 50
" 4.	" " " "	" 5 50
No. 1.	Porcelain Plate and Brass Plate	" 12 50
" 2.	" " " "	" 9 75
" 3.	" " " "	" 8 00
" 4.	" " " "	" 6 50
No. 1.	Iron Pan and Iron Plate	" 9 50
" 2.	" " " "	" 7 25
" 3.	" " " "	" 6 00
" 4.	" " " "	" 4 75



FAIRBANKS'

DRUGGISTS' EVEN BALANCE TRIP SCALE.

(WITH PAN AND PLATE FOR WEIGHTS.)

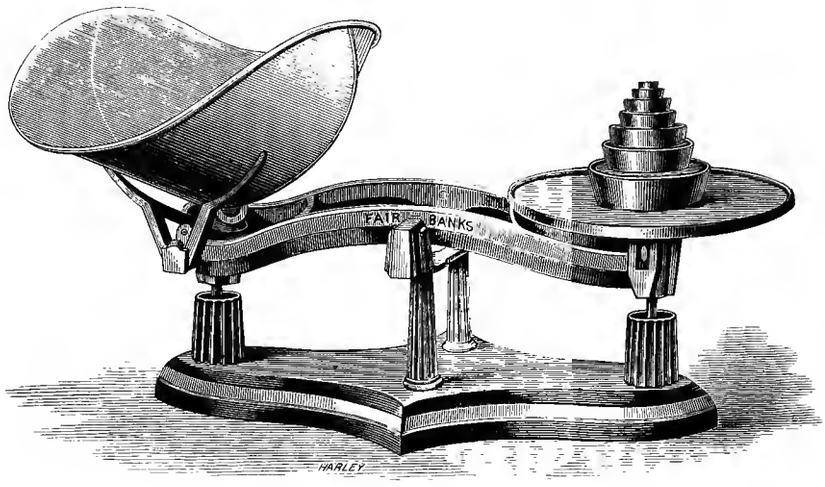
FAIRBANKS'

Grocers' Even Balance Scales.

(WITH WEIGHTS COMPLETE.)

No. 1.	Even Balance, With Tin Scoop	Capacity, ¼ oz. to 10 lbs.	Price, $7 00
" 2.	" " " " "	" ¼ " to 6 "	" 6 00
" 3.	" " " " "	" ¼ " to 4 "	" 5 00
No. 1.	Even Balance, With Brass Scoop	" ¼ " to 10 "	" 8 00
" 2.	" " " " "	" ¼ " to 6 "	" 6 75
" 3.	" " " " "	" ¼ " to 4 "	" 5 75

Scale with two Iron Plates, 50 cents extra each size.



FAIRBANKS'

GROCERS' EVEN BALANCE SCALE,

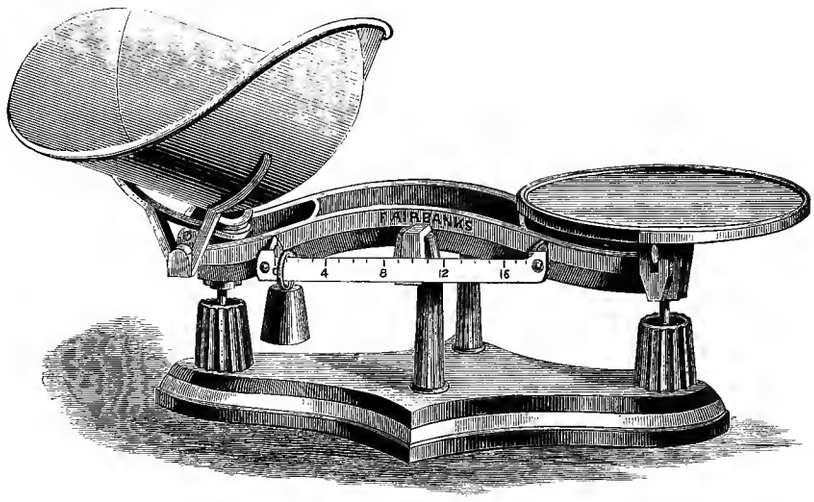
(WITH WEIGHTS COMPLETE.)

FAIRBANKS'

Grocers' Even Balance Scales.

(WITH SIDE BEAM AND WEIGHTS COMPLETE.)

No. 1.	Capacity, ¼ oz. to 10 lbs.	Tin Scoop.	Price,	$8 00
" 2.	" ¼ " to 6 "	" "	"	7 00
" 3.	" ¼ " to 4 "	" "	"	6 00
No. 1.	" ¼ " to 10 "	Brass Scoop.	"	9 00
" 2.	" ¼ " to 6 "	" "	"	7 75
" 3.	" ¼ " to 4 "	" "	"	6 75



FAIRBANKS'

GROCERS' EVEN BALANCE SCALE.

(WITH SIDE BEAM AND WEIGHTS COMPLETE.)

FAIRBANKS'

Improved Letter Balances.

Capacity, ½ oz. to 8 oz.	Price,	$3 00
" ¼ " to 8 "	"	3 00
" ½ " to 12 "	"	4 00
" ½ " to 34 "	"	6 00

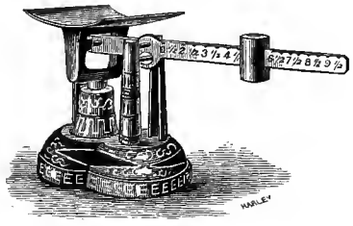
FAIRBANKS'

Improved Package Balance.

(FOR WEIGHING PERIODICALS, PAPERS, &c.)

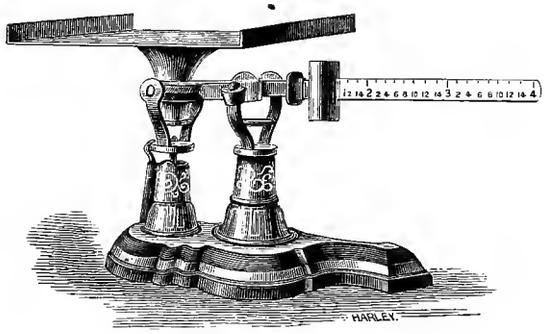
Capacity, ½ oz. to 4 lbs.	Price,	$8 00

ADJUSTED TO THE SYSTEMS OF ALL NATIONS.



FAIRBANKS'

IMPROVED LETTER BALANCE.



FAIRBANKS'

IMPROVED PACKAGE BALANCE.

FAIRBANKS'

Postal Balance.

(WITH DOUBLE BEAM.)

Capacity, ½ oz. to 6 lbs. . . . . Price, $12 00

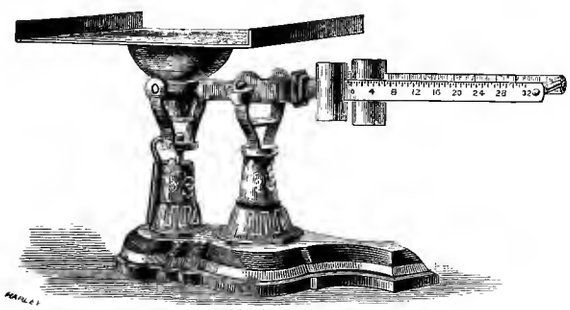
FAIRBANKS'

Postal Rate Balances.

These Balances meet the requirements of the International Postal Congress, held at Berne, at which time fifteen grammes was decided as the standard rate of postage among all countries there represented.

22 Rate Scales . . . . . Price, $ 3 00

200 " " . . . . . " 12 00



FAIRBANKS'

POSTAL BALANCE.

(WITH DOUBLE BEAM.)

FAIRBANKS'

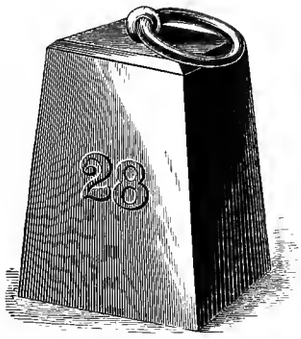
Standard Weights.

NEST WEIGHTS.

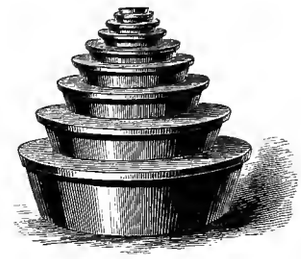
Capacity.	Price, Sealed Iron.	Price, Sealed Zinc.	Price, Cased Brass.	Price, Solid Brass.
8 lbs. down	$2 75	$5 50	$	$11 00
4 " "	1 75	3 50	4 00	6 00
2 " "	1 25	2 50	2 50	3 50
1 " "	1 00	1 75	1 75	2 00
8 oz. "	75	1 25	1 25	1 50

RING OR HANDLE WEIGHTS.

½ lb	Each	Price, $ 50
1 and 2 lbs.	"	" 65
3 "	"	" 1 00
4 "	"	" 1 25
5 and 7 "	"	" 1 50
10 "	"	" 1 85
14 "	"	" 2 25
20 "	"	" 2 75
28 "	"	" 3 50
50 "	"	" 5 00

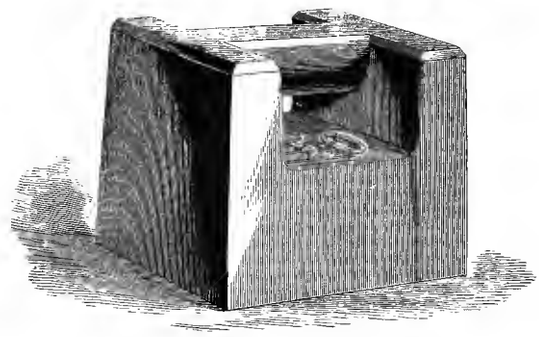


Square Ring Weights.



Nest Weights.

Round Handle Weights.



50 lb. Standard Test Weights.

FAIRBANKS'

STANDARD WEIGHTS.

FAIRBANKS'

Furnace Stock Charging Weighing Machines.

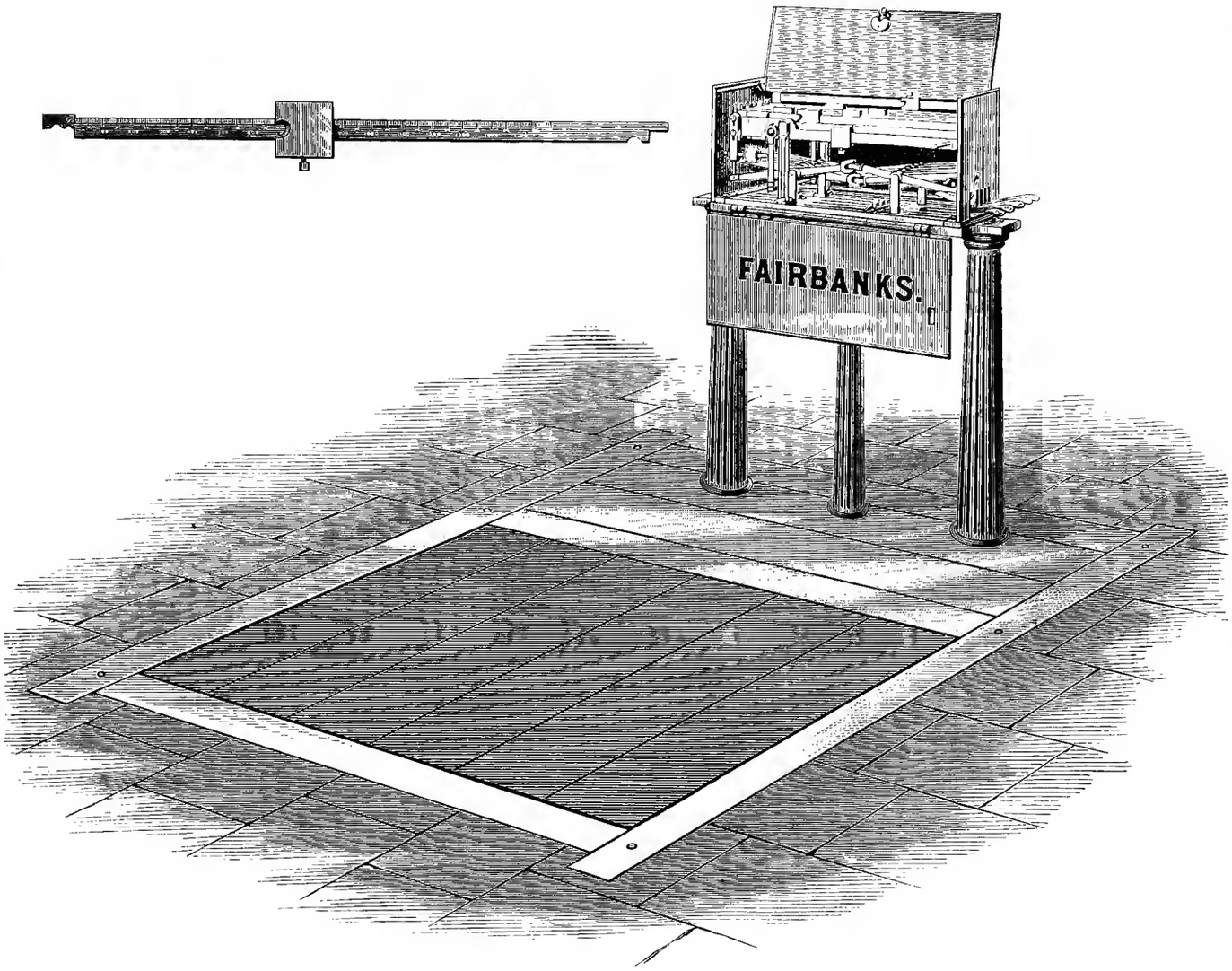
(WITH NEW PATENT BEAM.)

Machine made with four or more beams for giving the proportion of different qualities of ore and flux. Beams arranged so that after being adjusted they may be locked up and placed beyond control of the workman.

Platform, 4×5 ft. or 5×6 ft., as ordered.

4	Beams	Price,	$231 00
5	"	"	238 00
6	"	"	245 00
8	"	"	259 00

The prices for the above are exclusive of timber and foundation, which are to be furnished at purchaser's expense.



FAIRBANKS'

FURNACE STOCK CHARGING WEIGHING MACHINE.

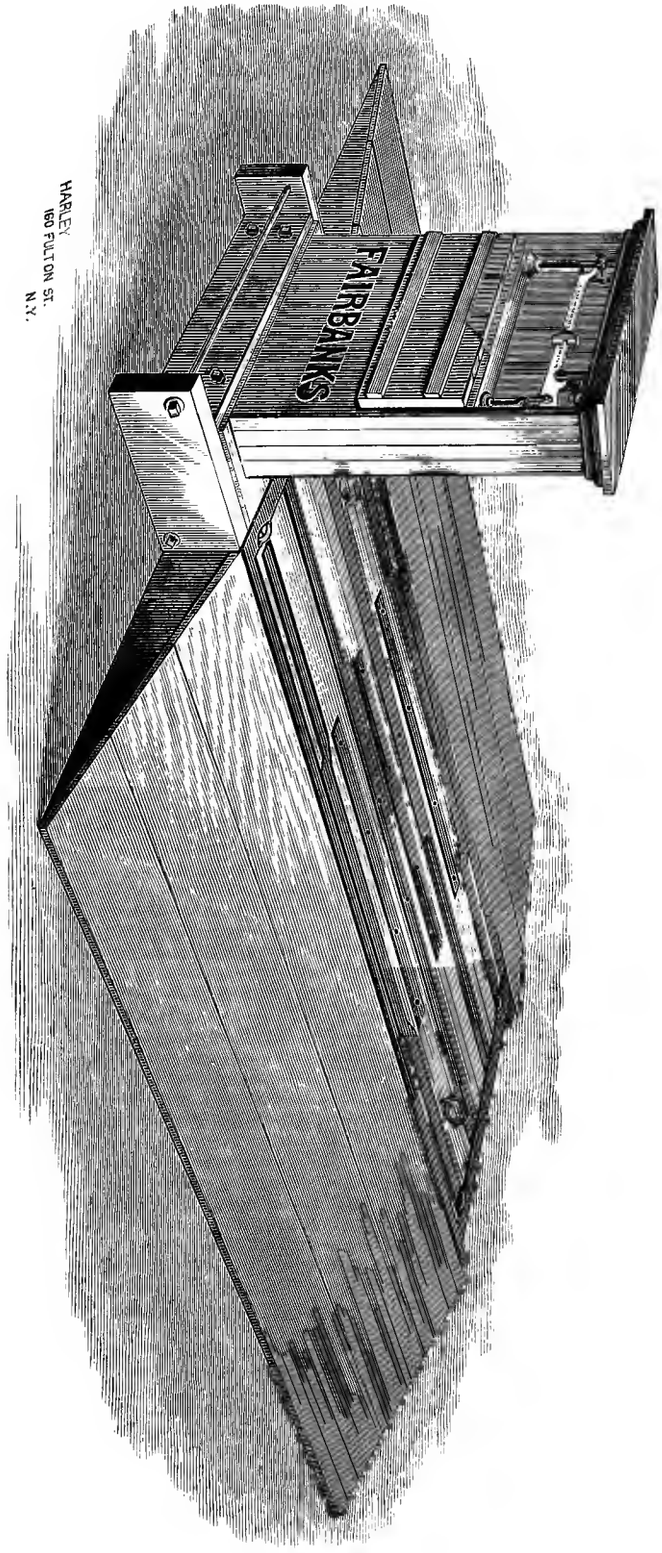
(WITH PATENT BEAM.)

FAIRBANKS'

Portable Cart Weighing Machines.

Capacity, 2 Tons. . . . Platform, 3×6½ feet. . . . . Price, $150 00

Price of Weighing Machine does not include Inclines.



FAIRBANKS'

PORTABLE CART WEIGHING MACHINE.

FAIRBANKS'

Hay Weighing Machines.

Capacity.	Size of Platform.	Distance from Edge of Platform to Beam Rod.	Price, Single Beam.	Price, Double Beam.
10 Tons	22 ft. × 10 ft. $3\frac{7}{8}$ in.	2 ft. 1 in.	$365 00	$380 00
10 "	18 " × 8 " 3 "	4 " $5\frac{1}{2}$ "	330 00	345 00
10 "	14 " × 8 " $4\frac{5}{8}$ "	2 " $0\frac{3}{4}$ "	300 00	315 00
8 "	18 " × 8 " 3 "	4 " $5\frac{1}{2}$ "	300 00	315 00
8 "	14 " × 8 " $4\frac{5}{8}$ "	2 " $0\frac{3}{4}$ "	275 00	290 00
6 "	18 " × 8 " 3 "	4 " $5\frac{1}{2}$ "	275 00	290 00
6 "	14 " × 8 " $4\frac{5}{8}$ "	2 " $0\frac{3}{4}$ "	250 00	265 00
5 "	14 " × 8 " $4\frac{1}{4}$ "	2 " 1 "	225 00	235 00
4 "	14 " × 8 " $4\frac{1}{4}$ "	2 " 1 "	200 00	210 00
3 "	14 " × 8 " $0\frac{1}{2}$ "	1 " $2\frac{1}{4}$ "	175 00	185 00
2 "	12 " × 7 " $5\frac{5}{8}$ "	1 " $2\frac{7}{8}$ "	145 00	155 00

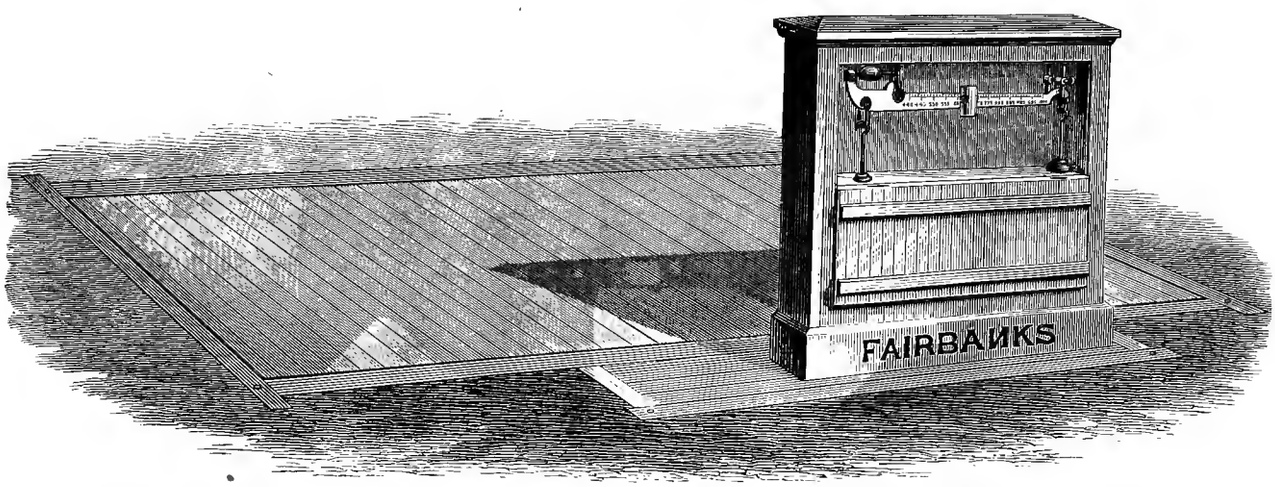
WEIGHING MACHINES REQUIRING SHALLOW PIT.

Capacity.	Size of Platform.	Distance from Edge of Platform to Beam Rod.	Price, Single Beam.	Price, Double Beam.
6 Tons	22 ft. × 8 ft.	2 ft. 9 in.	$250 00	$265 00
6 "	14 " × 8 "	2 " $2\frac{1}{2}$ "	225 00	240 00
5 "	14 " × 8 "	2 " $2\frac{1}{2}$ "	200 00	210 00
4 "	14 " × 8 "	2 " $2\frac{1}{2}$ "	170 00	180 00
3 "	14 " × 8 "	2 " $2\frac{1}{2}$ "	145 00	155 00

The sizes of platforms of these Weighing Machines may be varied somewhat from the above dimensions, and without adding to the cost of the irons.

The prices for the above are exclusive of timber and foundation, which are to be furnished at purchaser's expense.

SUSPENSION HAY WEIGHING MACHINES furnished to order, when required.



FAIRBANKS'

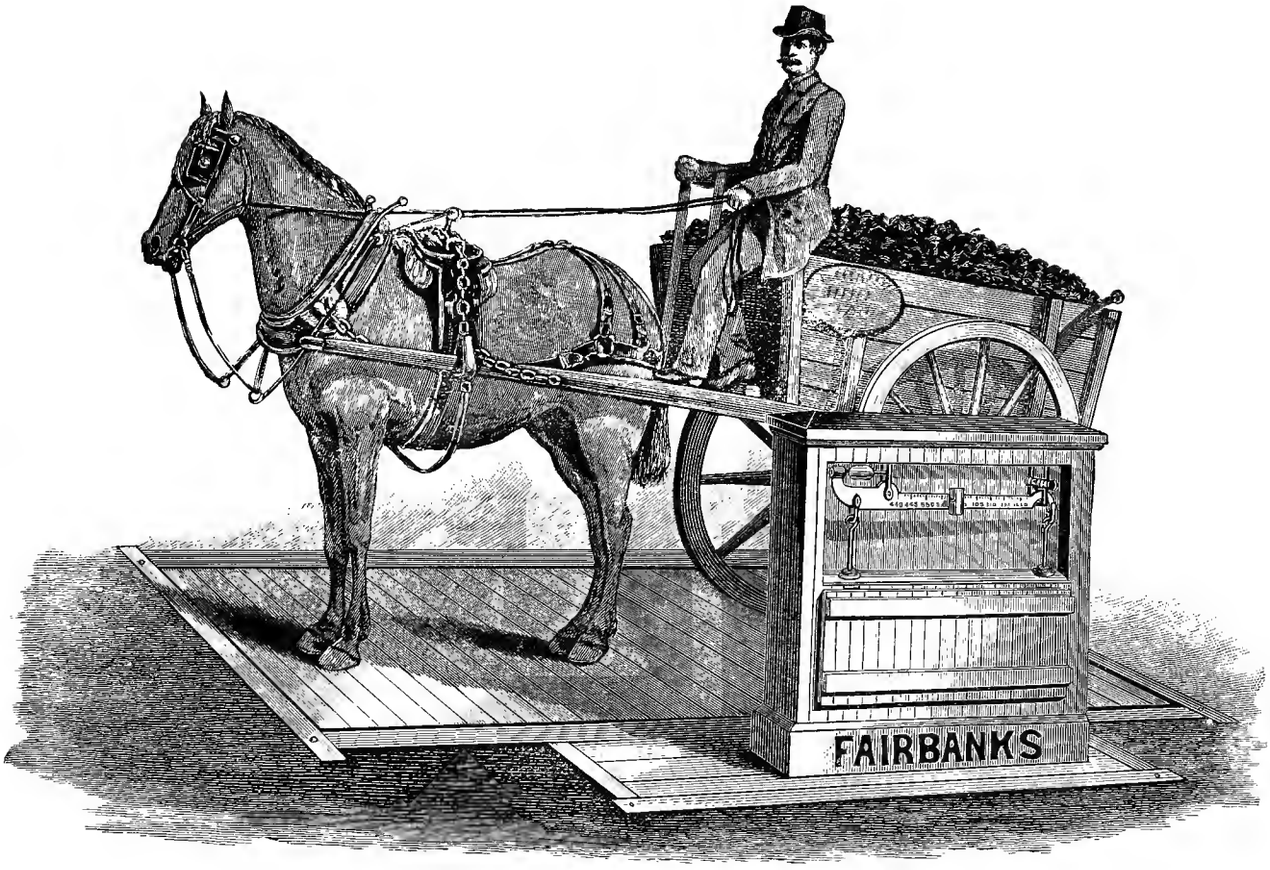
HAY WEIGHING MACHINE.

FAIRBANKS'

Coal Dealers' Weighing Machines.

Capacity.	Size of Platform.	Distance from edge of Platform to Beam Rod.	Price, Single Beam.	Price, Double Beam.
3 Tons	14×7 ft. $2\frac{5}{8}$ inches	1 ft. $11\frac{7}{8}$ inches	$145 00	$155 00
4 "	14×7 " $2\frac{5}{8}$ "	1 " $11\frac{7}{8}$ "	180 00	190 00

The above prices are exclusive of the cost of timber and foundation, which is to be paid by purchaser.



FAIRBANKS'

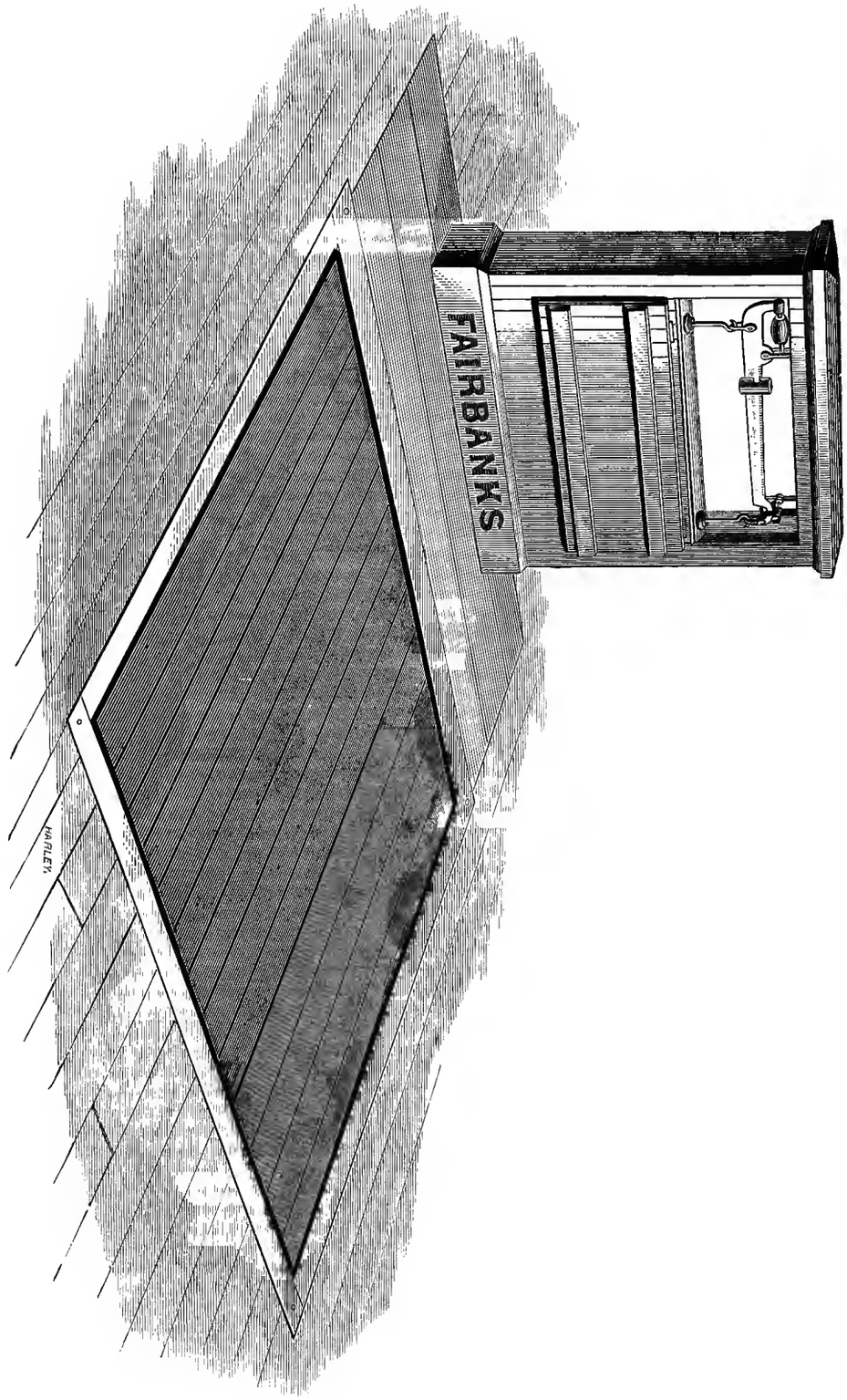
COAL DEALERS' WEIGHING MACHINE.

FAIRBANKS'

Miners' Weighing Machines.

Capacity.	Platform.	Price, Single Beam.	Price, Double Beam.	Portable, Complete, Single Beam.	Portable, Complete, Double Beam.
2 Tons	4½ ft. × 2 ft. 11½ in.	$115 00	$123 50	$155 00	$163 50
2 "	6 " × 4 " 11¾ "	135 00	143 50	180 00	188 50
3 "	6 " × 4 " 11¾ "	150 00	163 50	200 00	208 50
4 "	6½ " × 4 " 10⅞ "	170 00	180 00		
5 "	7 " × 4 " 9⅞ "	185 00	195 00		
5 "	5 " × 4 " "	185 00	195 00		
6 "	7½ " × 4 " 8¾ "	205 00	215 00		

The prices for the above are exclusive of timber and foundation, which are to be furnished at purchaser's expense, with the exception of the Portable pattern, which is timbered complete.



FAIRBANKS'
MINERS' WEIGHING MACHINE.

FAIRBANKS'

Stock Weighing Machines.

(WITH PATENT BEAM.)

15 TON.

16 feet Lever, 6 feet 4 inch Connections.

Platform, 24 ft. × 9 ft. $6\frac{3}{4}$ inches	1 ft. $10\frac{5}{8}$ inches to Beam Rod.		
" 22 " × 10 " $3\frac{7}{8}$ "	2 " 1 " " " "	$470 00	
" 20 " × 10 " $11\frac{3}{4}$ "	2 " 3 " " " "		

15 TON.

15 feet Lever, 5 feet Connections.

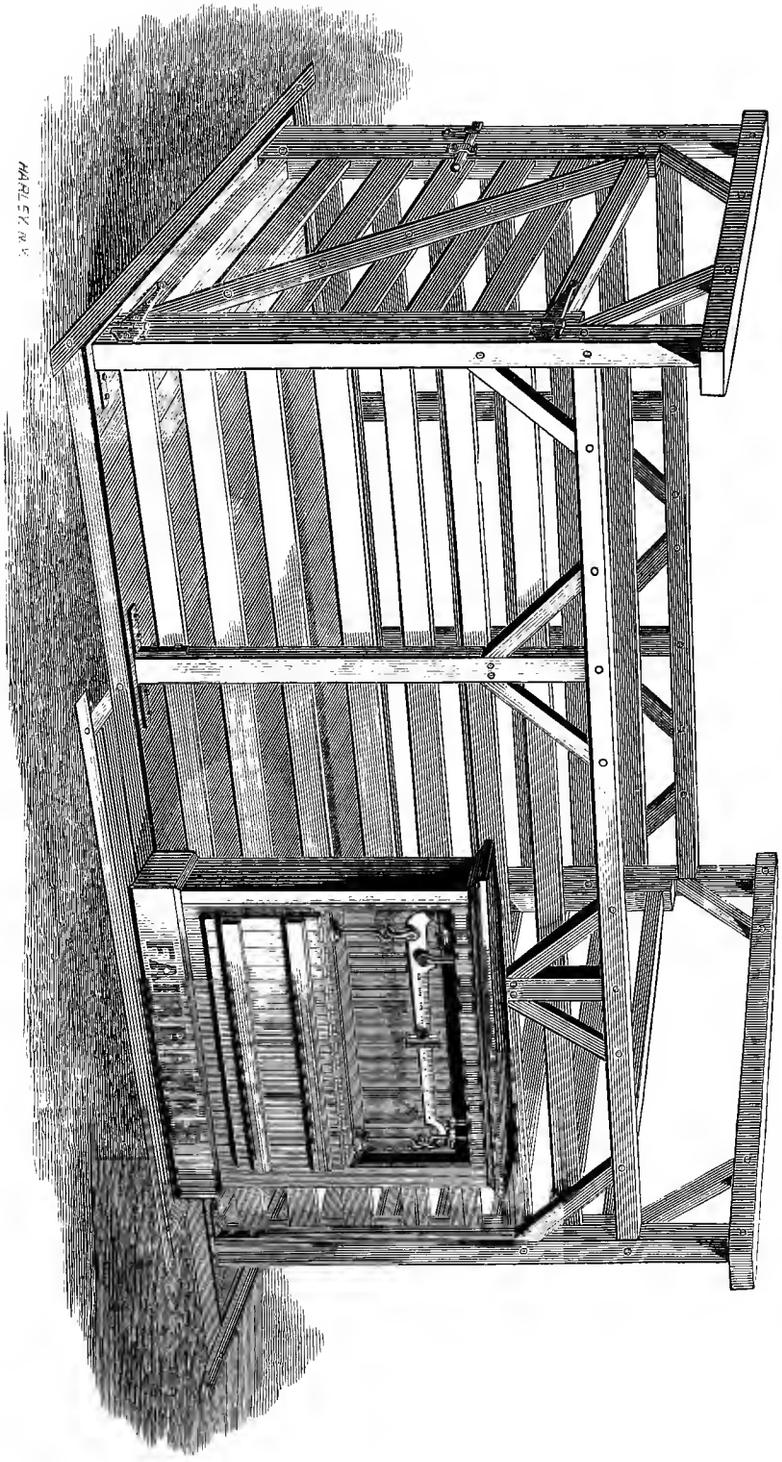
Platform, 23 ft. × 7 ft. $6\frac{3}{4}$ inches	2 ft. $11\frac{1}{4}$ inches to Beam Rod.		
" 20 " × 8 " $6\frac{1}{4}$ "	3 " $5\frac{1}{8}$ " " " "	$450 00	

10 TON.

16 feet Lever, 6 feet 4 inch Connections.

Platform, 24 ft. × 9 ft. $6\frac{3}{4}$ inches	1 ft. $10\frac{5}{8}$ inches to Beam Rod.		
" 22 " × 10 " $3\frac{7}{8}$ "	2 " 1 " " " "	$395 00	
" 20 " × 10 " $11\frac{3}{4}$ "	2 " 3 " " " "		

The above prices are exclusive of the cost of timber and foundation, which is to be paid by purchaser.


FAIRBANKS'
STOCK WEIGHING MACHINE.
(WITH PATENT BEAM.)

FAIRBANKS'

Sugar Cane Weighing Machines.

WITH TIMBER, COMPLETE.

No. 1.	Capacity,	6	Tons	Platform,	7×14	ft.	Price,	$200	00
" 2.	"	8	"	"	8×14	"	"	210	00
" 3.	"	10	"	"	8×14	"	"	235	00
" 4.	"	10	"	"	8×16	"	"	240	00
" 5.	"	10	"	"	9×18	"	"	310	00

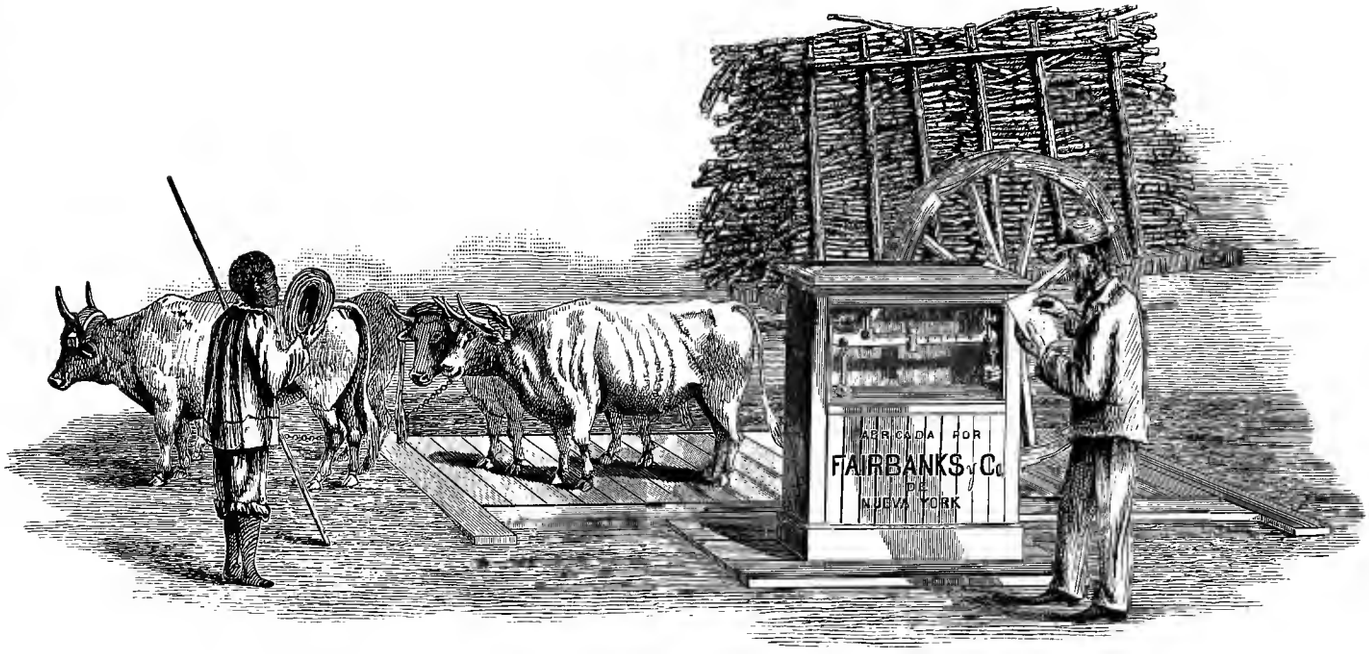
ADJUSTED TO ANY STANDARD.

These Weighing Machines are manufactured expressly for Plantation use, and are perfectly adapted to weighing Sugar Cane on carts.

The No. 5 Weighing Machine has a platform 9×18 ft., and was originally constructed expressly for the Cuban trade, and is just the size required for the carts generally used by Cuban Planters.

Parties ordering these Weighing Machines should be careful to select one that has a platform large enough to accommodate the carts or wagons to be weighed.

These Weighing Machines are constructed of the best material, the iron work is all very heavy, the bearings are all of cast steel, the wood work of the best pitch pine. They are all fitted, set up, tested, and marked in New York, and, as we furnish complete plans with each Weighing Machine, there is not the least difficulty in erecting them on the plantations where they are to be used.



FAIRBANKS'

SUGAR CANE WEIGHING MACHINE.

FAIRBANKS'

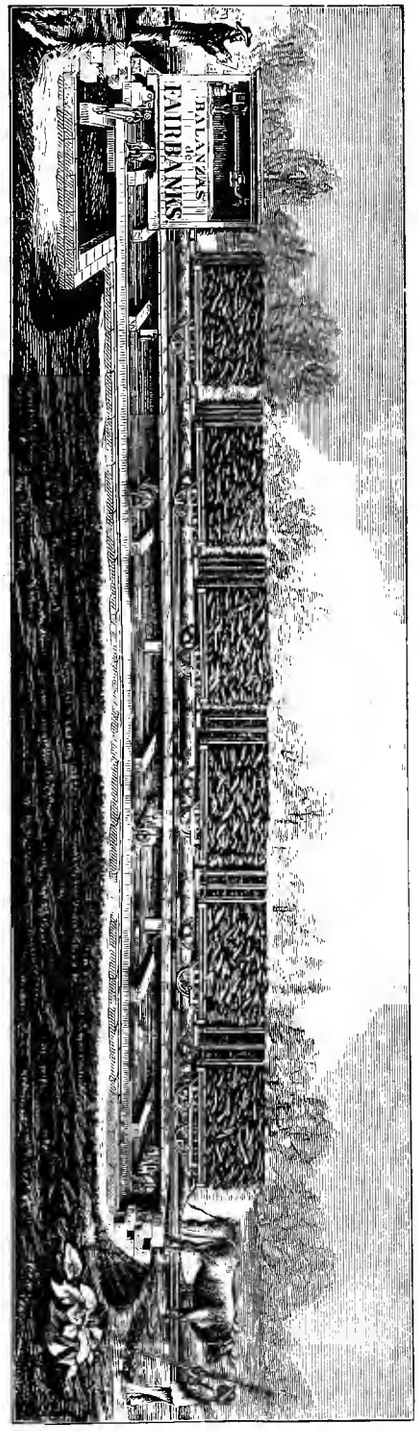
Plantation Railroad Track Weighing Machines.

With timber complete, free on board in New York.

Platform,	53	feet	long.	Capacity, 25 Tons.		Price,	$920 00
"	42	"	"	" 25 "		"	850 00
"	34	"	"	" 25 "		"	800 00
"	30	"	"	" 20 "		"	700 00
"	29	"	"	" 20 "		"	650 00
"	26	"	"	" 20 "		"	600 00
"	24	"	"	" 20 "		"	500 00

This design represents a Platform Weighing Machine constructed especially for weighing cars loaded with Sugar Cane, such as are now used very extensively in Cuba, in connection with Portable Railroads.

We build them of any desired length, but those most in use have a platform 53 feet long, and of 25 tons capacity, suitable for railroads of from 30 to 36 inch gauge. This is the proper size for weighing seven cars at a time of the Bass Patent. They are constructed of the best material, the iron parts being very heavy, all the bearings of cast steel, and the wood work of the best pitch pine. They are all set up, adjusted and marked in New York, and, as we send complete plans with each Weighing Machine, there is no difficulty in erecting them on the plantations where they are to be used. They are not designed for locomotives to pass over.



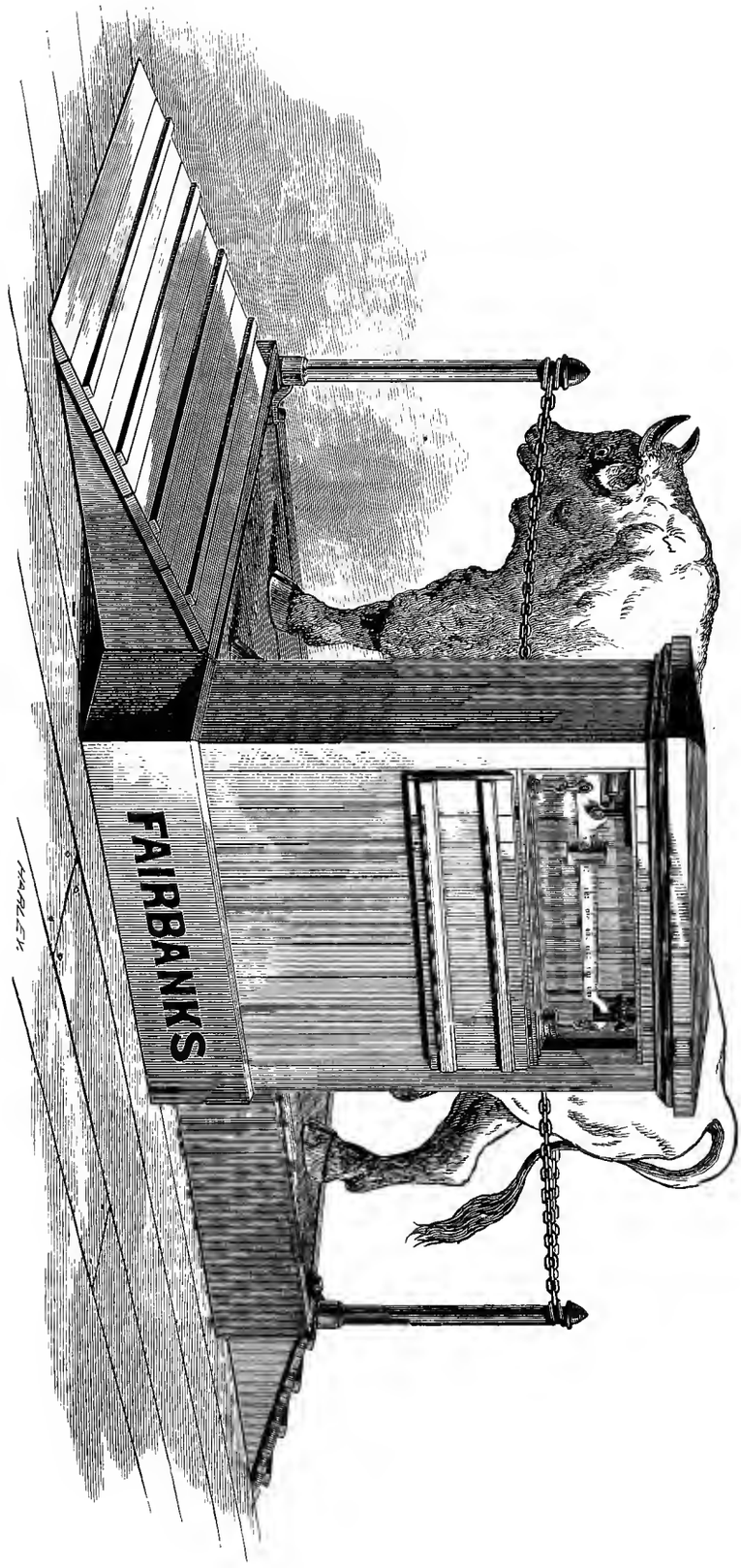
FAIRBANKS'

PLANTATION RAILROAD TRACK WEIGHING MACHINE.

FAIRBANKS'

Bullock Weighing Machines.

Capacity, 2,000 lbs. . Platform, 3 ft. 2 inches× 5 ft. 6 inches. . . . Price, $150 00



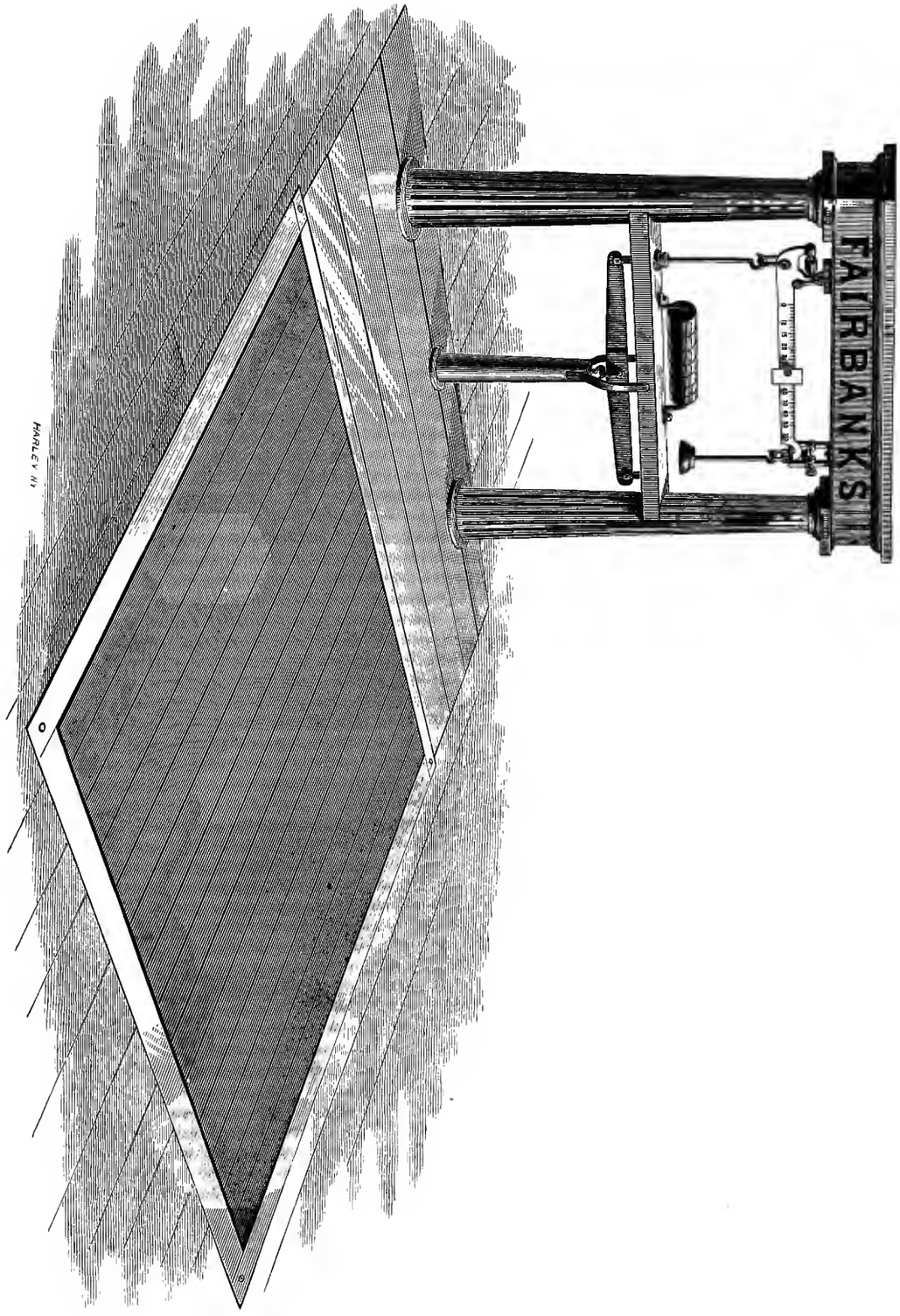
FAIRBANKS'
BULLOCK WEIGHING MACHINE.

FAIRBANKS'

Railroad Depot Weighing Machines.

No. 1.	Capacity,	6	Tons,	9	ft.	×	10	ft.	Single Beam,	$280	00	Double Beam,	$295	00
" 2.	"	4	"	7	"	×	9	"	" "	230	00	" "	240	00
" 3.	"	3	"	5	"	×	6	"	" "	210	00	" "	218	50
" 4.	"	2	"	$4\frac{3}{4}$	"	×	$7\frac{1}{2}$	"	" "	168	00	" "	176	50

The prices for the above are exclusive of timber and foundation, which are to be furnished at purchaser's expense.



FAIRBANKS'
RAILROAD DEPOT WEIGHING MACHINE.

FAIRBANKS'

Railroad Track Weighing Machines.

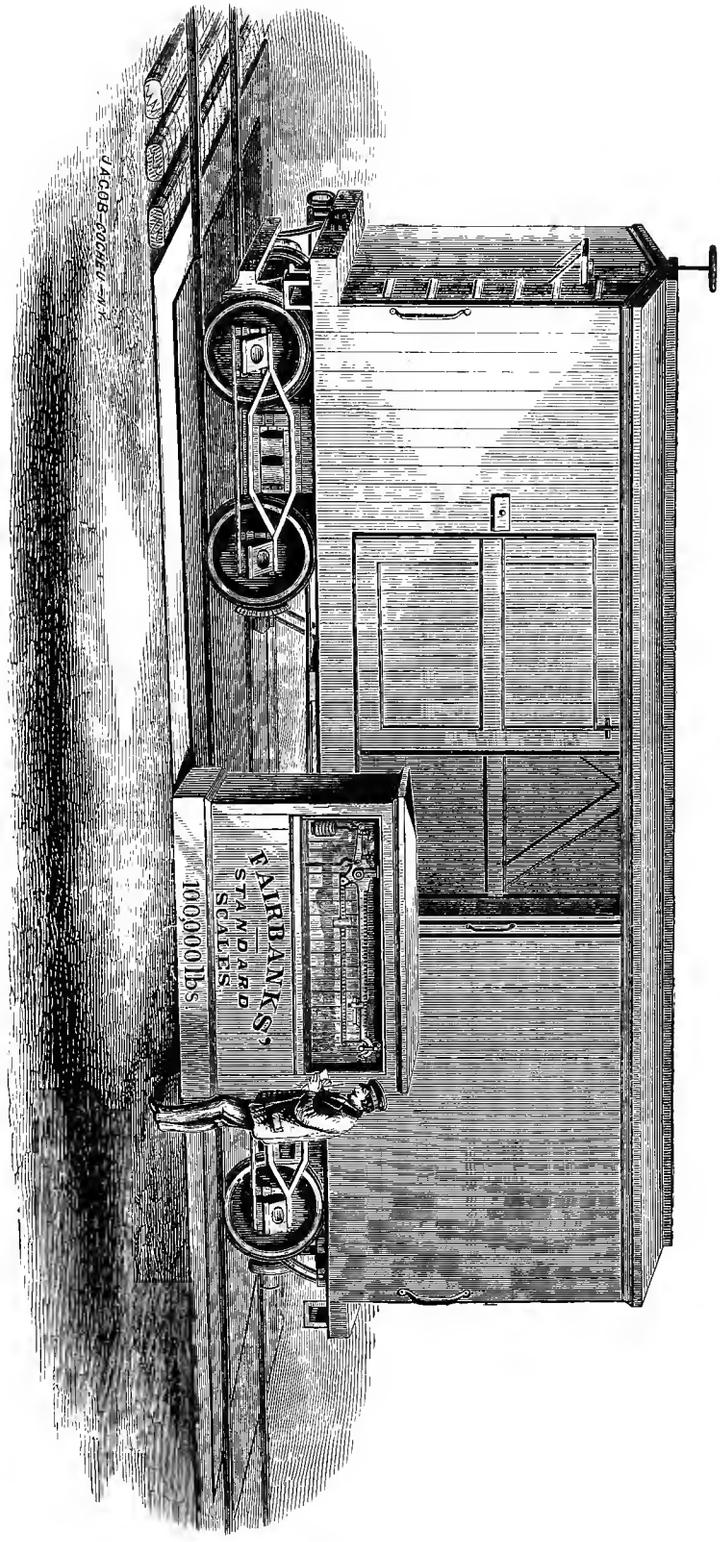
Capacity.	Length of Platform.	Price, Iron Frame Pattern.
150 Tons	130 ft. 0 in.	$3,700 00
150 "	123 " 0 "	3,200 00
100 "	112 " 0 "	2,800 00
75 "	84 " 0 "	2,200 00
65 "	61 " 0 "	1,850 00
50 "	42 " 0 "	1,100 00
50 "	34 " 0 "	1,025 00
40 "	34 " 0 "	1,000 00
30 "	34 " 0 "	975 00
40 "	32 " 0 "	950 00
30 "	32 " 0 "	925 00
40 "	30 " 0 "	900 00
30 "	30 " 0 "	875 00
25 "	26 " 0 "	750 00
25 "	24 " 0 "	700 00
20 "	20 " 6 "	600 00
20 "	16 " 0 "	600 00
12 "	12 " 0 "	500 00

The prices for the above are exclusive of timber and foundation, which are to be furnished at purchaser's expense.

All the above are furnished with Patent Beams.

Double Beam for Track Weighing Machine, extra $20 00

Suspension Track Weighing Machines, also Weighing Machines of greater length than 130 feet, furnished by contract when required.



FAIRBANKS'
RAILROAD TRACK WEIGHING MACHINE.

FAIRBANKS'

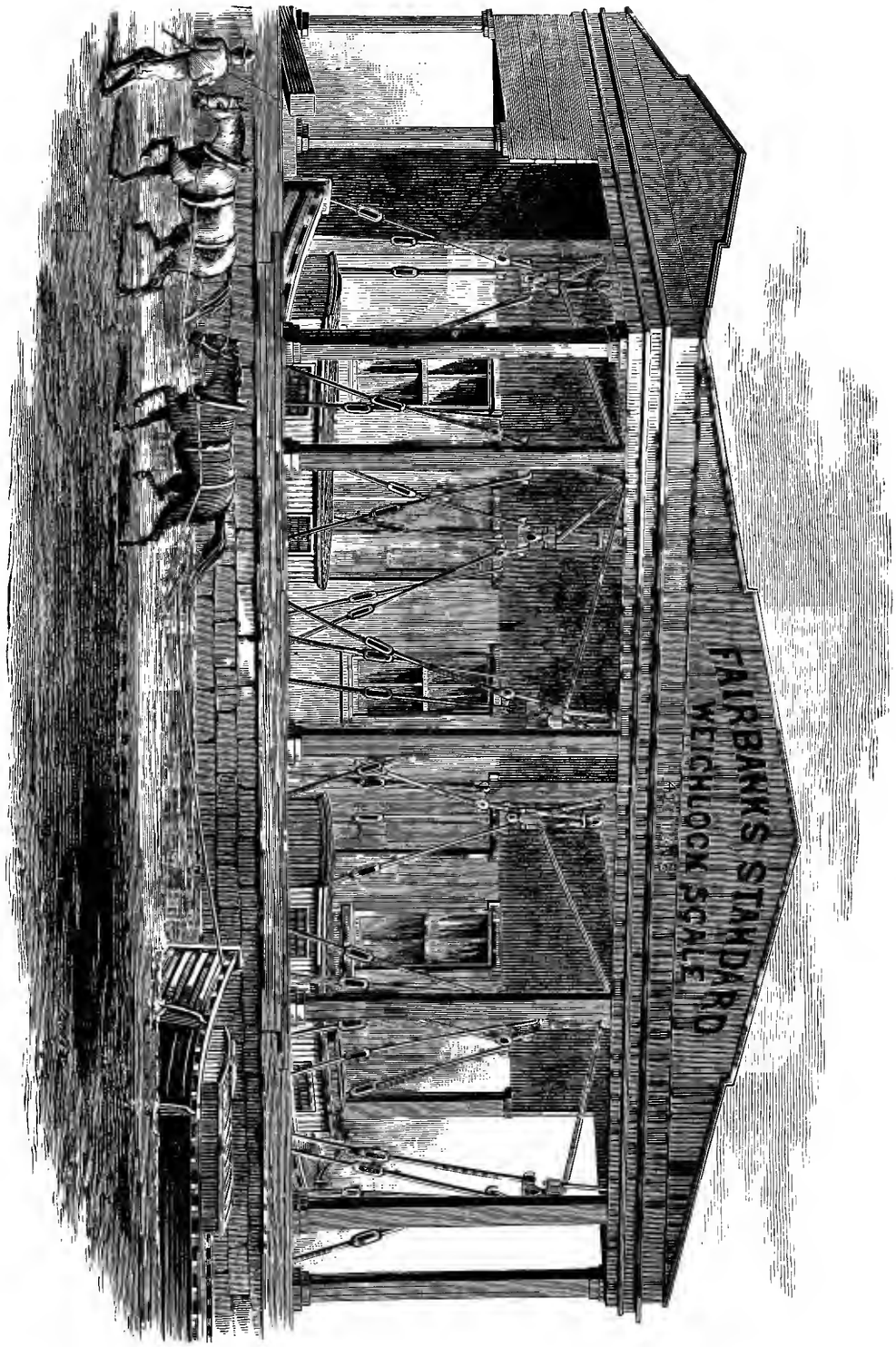
Canal or Weigh Lock Weighing Machines.

(FOR WEIGHING LOADED CANAL BOATS.)

The Levers for this modification of Machine are supported over the lock upon iron columns, with a strong cradle of timber suspended from them in the water. The boat is placed in the lock, and the water drawn out, leaving the boat resting in the cradle. The weight is then ascertained at once from the weigh beam, which is adjusted to indicate from 25 pounds to the full capacity of the Machine.

Capacity, from 150 to 500 Tons.

Estimates furnished when desired.



FAIRBANKS'

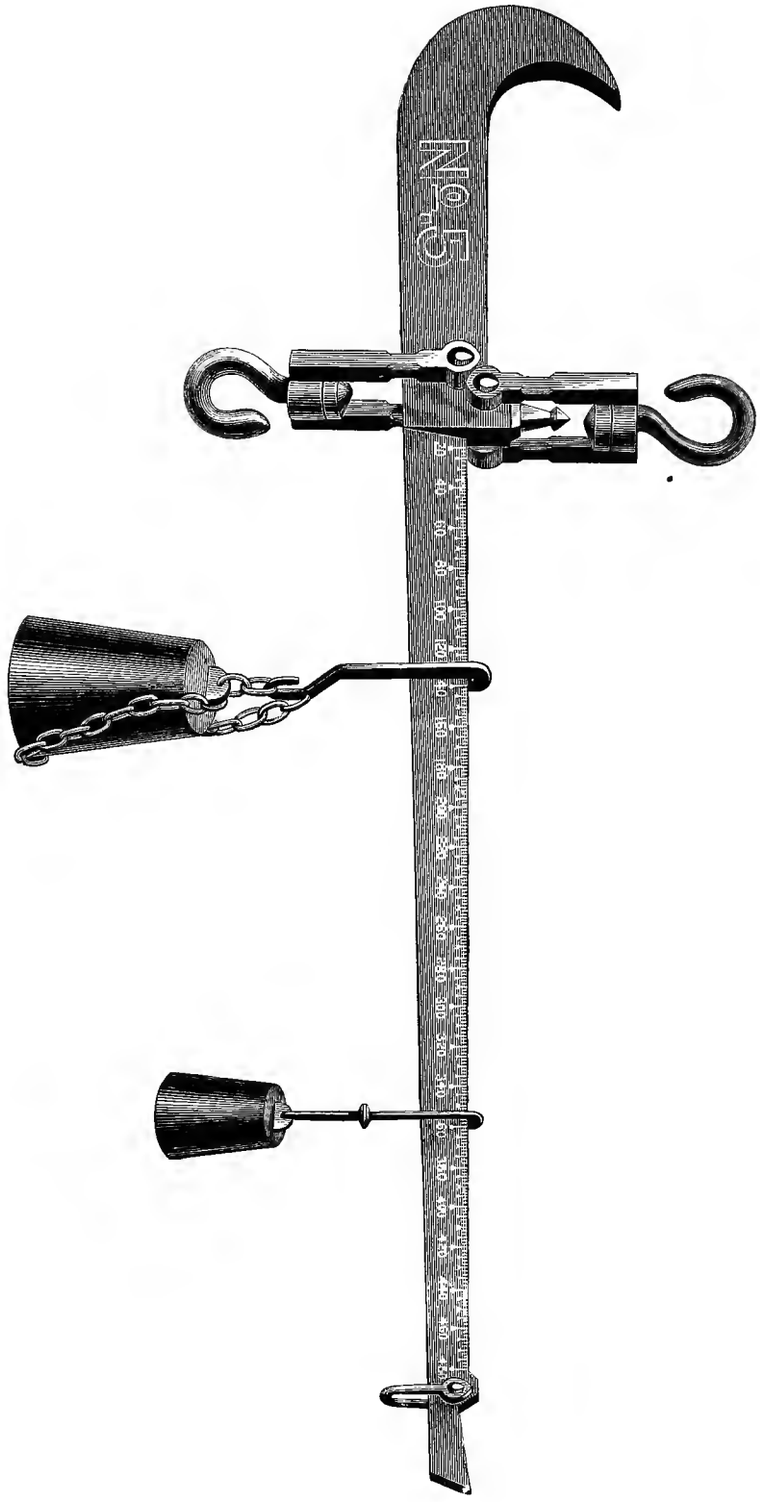
CANAL OR WEIGH LOCK WEIGHING MACHINE.

FAIRBANKS'

Weighmasters' Beams.

(WITH POISES ONLY.)

			Price, Best Japanned. Iron Poises.	Price, Polished. Iron Poises.	Price, Brass. Brass Poises.
No. 1.	Capacity,	5,000 lbs.	$83 00	$105 00	
" 2.	"	4,000 "	66 00	82 00	
" 3.	"	3,500 "	58 00	72 00	
" 4.	"	3,000 "	55 00	67 00	$180 00
" 5.	"	2,500 "	48 00	58 00	165 00
" 6.	"	2,000 "	41 00	50 00	150 00
" 7.	"	1,500 "	32 00	40 00	110 00
" 8	"	1,200 "	27 00	33 00	96 00
" 9.	"	1,000 "	24 50	30 00	75 00
" 10.	"	800 "	22 00	27 00	68 00
" 10½.	"	700 "	19 00	24 00	62 00
" 11.	"	600 "	15 50	20 00	56 00
" 12	"	500 "	14 00	18 50	52 00
" 13.	"	400 "	12 50	16 50	44 00
" 14.	"	300 "	9 00	13 00	35 00
" 14½.	"	250 "	8 50	12 50	32 50
" 15.	"	200 "	8 00	12 00	30 00
" 15½.	"	150 "	7 50	11 50	25 50
" 16.	"	100 "	7 00	11 00	21 00



FAIRBANKS'

WEIGHMASTERS' BEAMS.

FAIRBANKS'

New York Cotton Beam.

(WITH POISES ONLY. NOTCHED TOP.)

		Weighing.	Price, 1 Iron Poise.	Price, 1 Brass Poise.
No. 17.	Japanned Beam	640 lbs. on each side	$28 00	$33 00
" 18.	Polished "	640 " " "	40 00	45 00
" 19.	Japanned "	800 " " "	32 00	37 00
" 20.	Polished "	800 " " "	42 00	47 00

FAIRBANKS'
NEW YORK COTTON BEAM.

FAIRBANKS'

Compound Beam, for Use on Cranes.

Capacity,	1,000	lbs.	Price,	$52 00
"	2,000	"	"	62 00
"	3,000	"	"	75 50
"	4,000	"	"	83 00
"	5,000	"	"	90 00
"	6,000	"	"	97 00
"	7,000	"	"	104 00
"	8,000	"	"	110 00
"	10,000	"	"	125 00
"	12,000	"	"	150 00
"	15,000	"	"	175 00
"	20,000	"	"	200 00

Larger Beams made to order.

FAIRBANKS'

COMPOUND BEAM, FOR USE ON CRANES.

FAIRBANKS'

Large Even Beam.

Capacity,	300 lbs	Length of Beam,	$2\frac{1}{2}$ ft	Price,	$24 00
"	600 "	"	"	3 "	"	33 00
"	1,000 "	"	"	4 "	"	50 00
"	2,000 "	"	"	5 "	"	60 00
"	3,000 "	"	"	6 "	"	72 00
"	4,000 "	"	"	$6\frac{1}{2}$ "	"	112 00

FAIRBANKS'
LARGE EVEN BEAM.

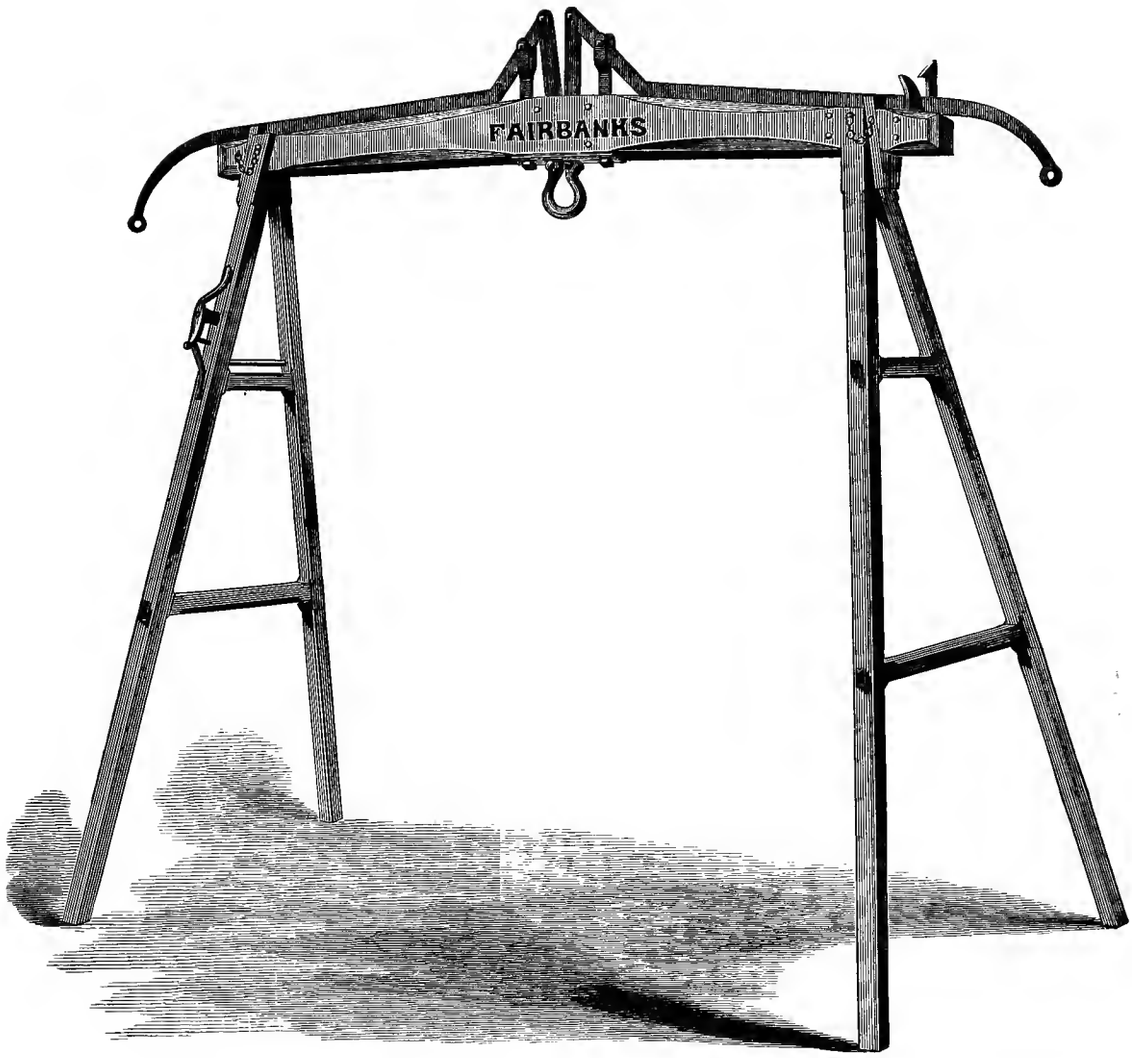
FAIRBANKS'

Weighmasters' Frames.

Capacity,	800 lbs. and under.	Single Lever,	$23 00.				
"	1,000 "	"	"	24 00.			
"	1,200 "	"	"	29 00.			
"	1,500 "	"	"	30 00.	Double Lever,		$35 00
"	2,000 "	"	"	35 00.	"	"	42 00
"	2,500 "	"	"	39 00.	"	"	46 00
"	3,000 "	"	"	44 00.	"	"	49 00
"	4,000 "				"	"	60 00
"	5,000 "				"	"	70 00
"	6,000 "				"	"	90 00

Cotton Frames.

New York Pattern, 640 lbs.	Price, $28 00
" " " 800 "	" 30 00
Chain Down Hauls for Frames, each	" 2 00



FAIRBANKS'

WEIGHMASTERS' FRAME.

FAIRBANKS'

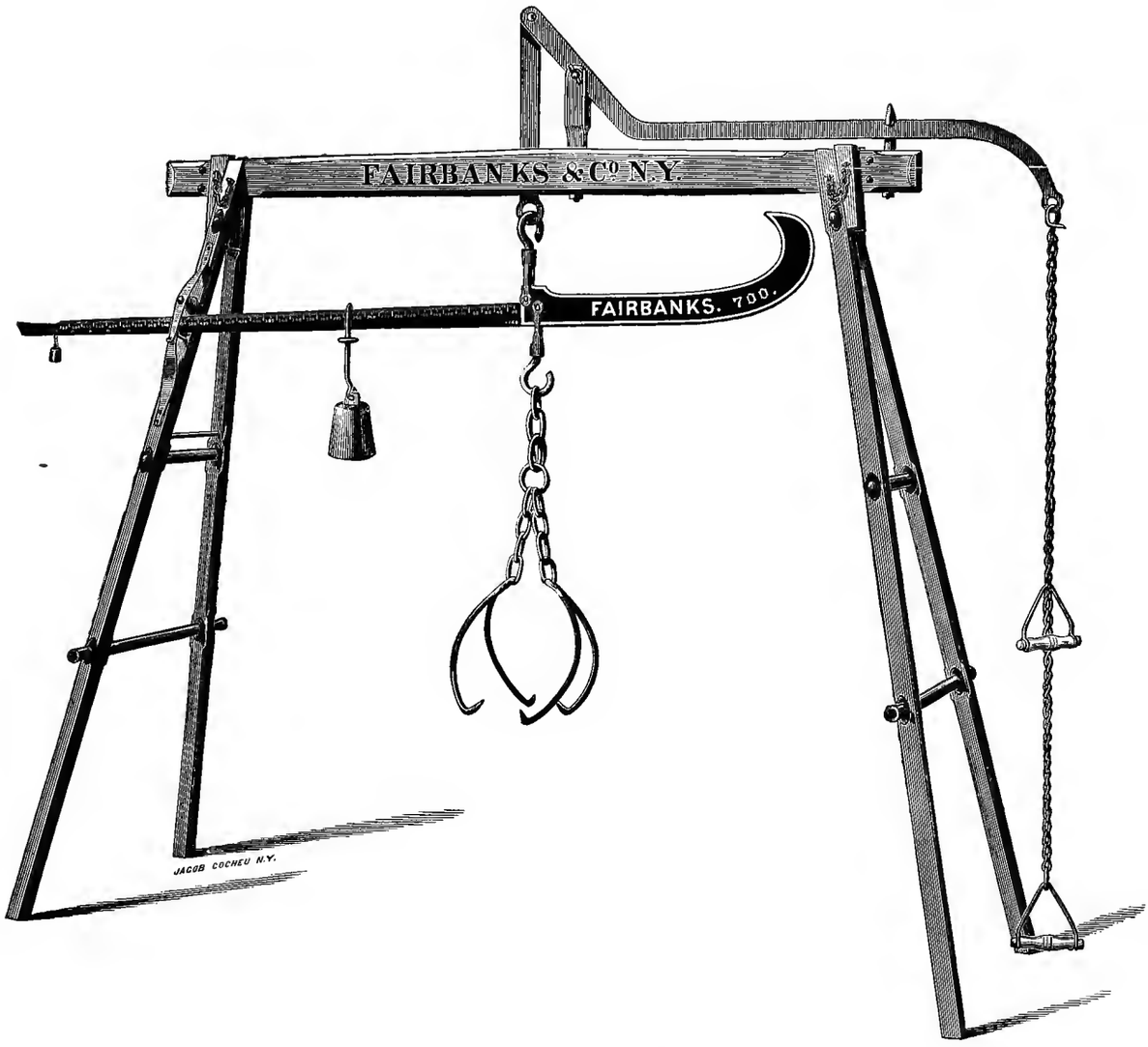
Southern Cotton Beam.

The following cut represents our new Cotton Beam and Frame complete, which comprises:

One 700 lb. Cotton Frame,
" 700 lb. Cotton Beam, Japanned,
" 16 lb. Iron Poise,
" Chain Downhaul,
" Set Cotton Hooks,
" Balance-poise for Hooks.

Price, ... $50 00

Everything connected with the Machine is made as light as we think will answer, and yet be strong and durable. If Polished Beams are required the price complete will be $57



FAIRBANKS'

SOUTHERN COTTON BEAM.

FAIRBANKS'

Pig Iron Cradle.

Capacity of one-half Ton	Price,	$ 80 00
" one Ton	"	100 00

FAIRBANKS'

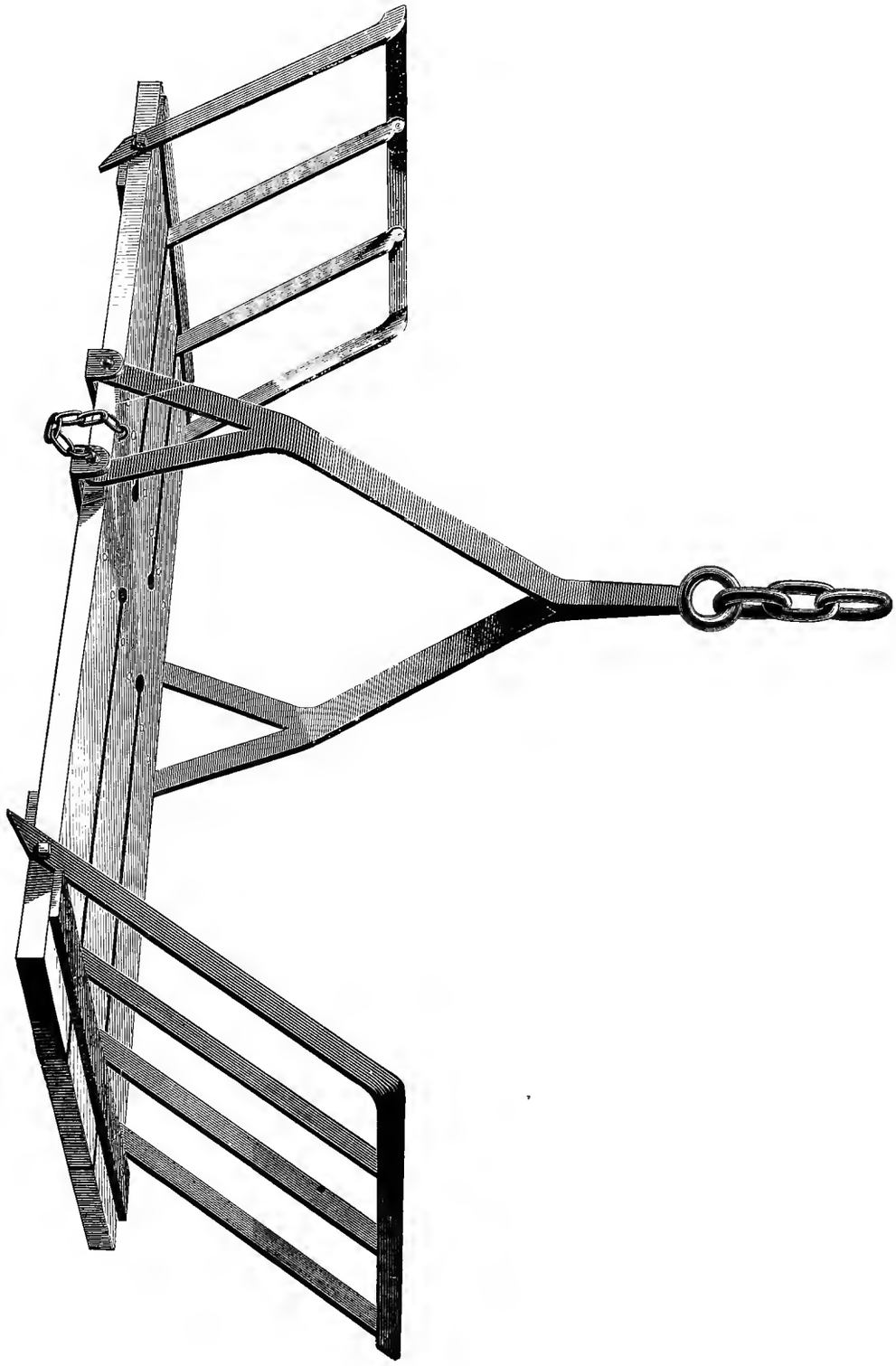
Pig Iron Cradle.

FAIRBANKS'

Folding Coffee Bottom.

1st Size, 6 ft. 2 in. Long, 2 ft. 4 in. wide. .. ..Price, $45 00

2d " 5 " 10 " " 2 " 2 " " .... " 40 00



FAIRBANKS'

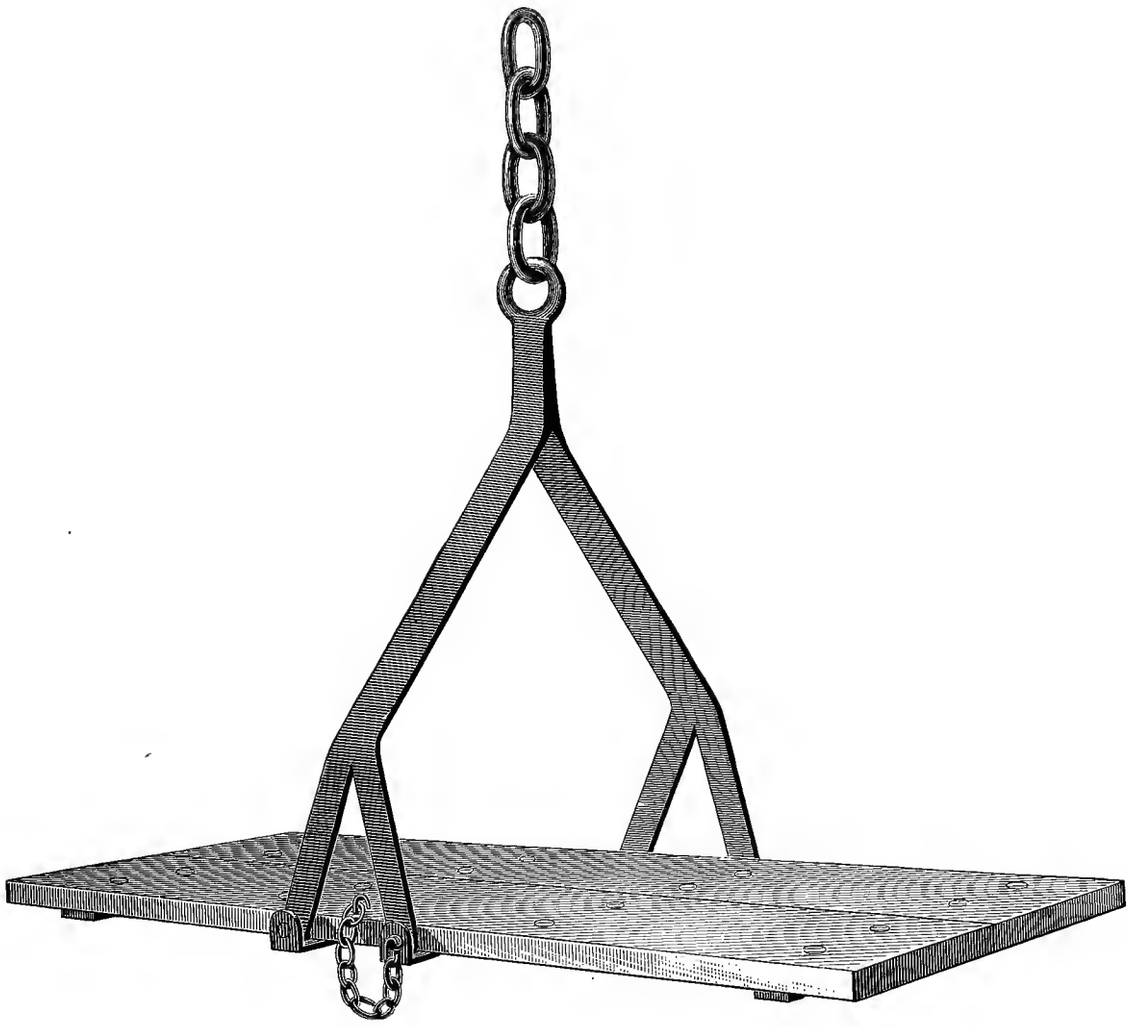
FOLDING COFFEE BOTTOM.

FAIRBANKS'

Plain Coffee Bottom.

1st Size, 6 ft. Long, 2 ft. 4 in. Wide ..... Price, $40 00

2d " 5 " 8 in. Long, 2 ft. 2 in. Wide ..... " 35 00



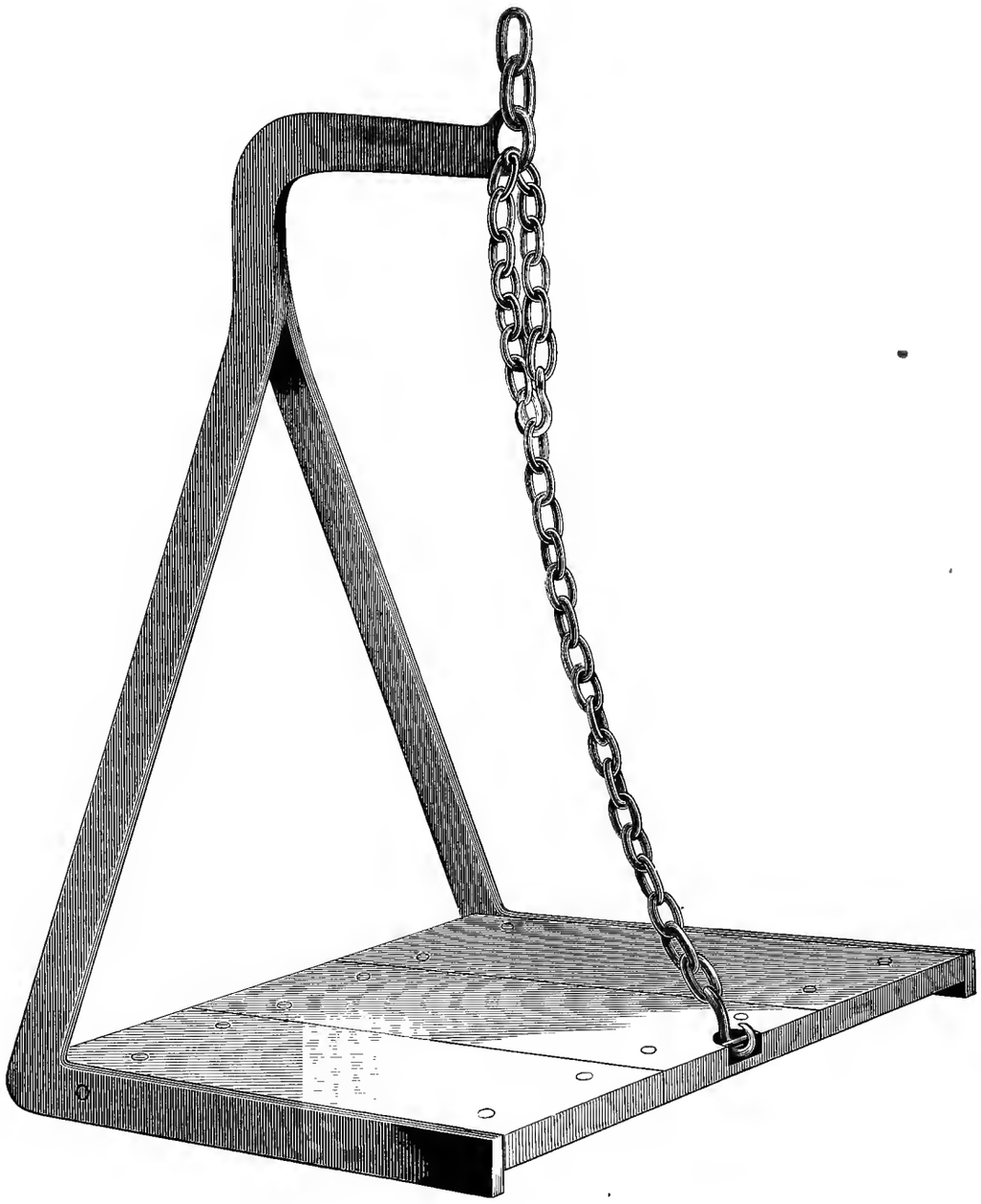
FAIRBANKS'

PLAIN COFFEE BOTTOM.

FAIRBANKS'

Standing Bottom.

1st	Size,	30×36	inches	.....	Suitable	for	2,500	to	3,000	lbs. Beam	.....	Price,	$35 00
2d	"	27×33	"	....	"	"	1,500	"	2,000	" "	.. ..	"	30 00
3d	"	24×27	"	....	"	"	1,000	"	1,200	" "	.. ..	"	25 00
4th	"	22×26	"	.....	"	"	600	"	800	" "	..	"	22 00
5th	"	20×24	"	..	"	"	300	"	500	" "	.. ..	"	20 00



FAIRBANKS'

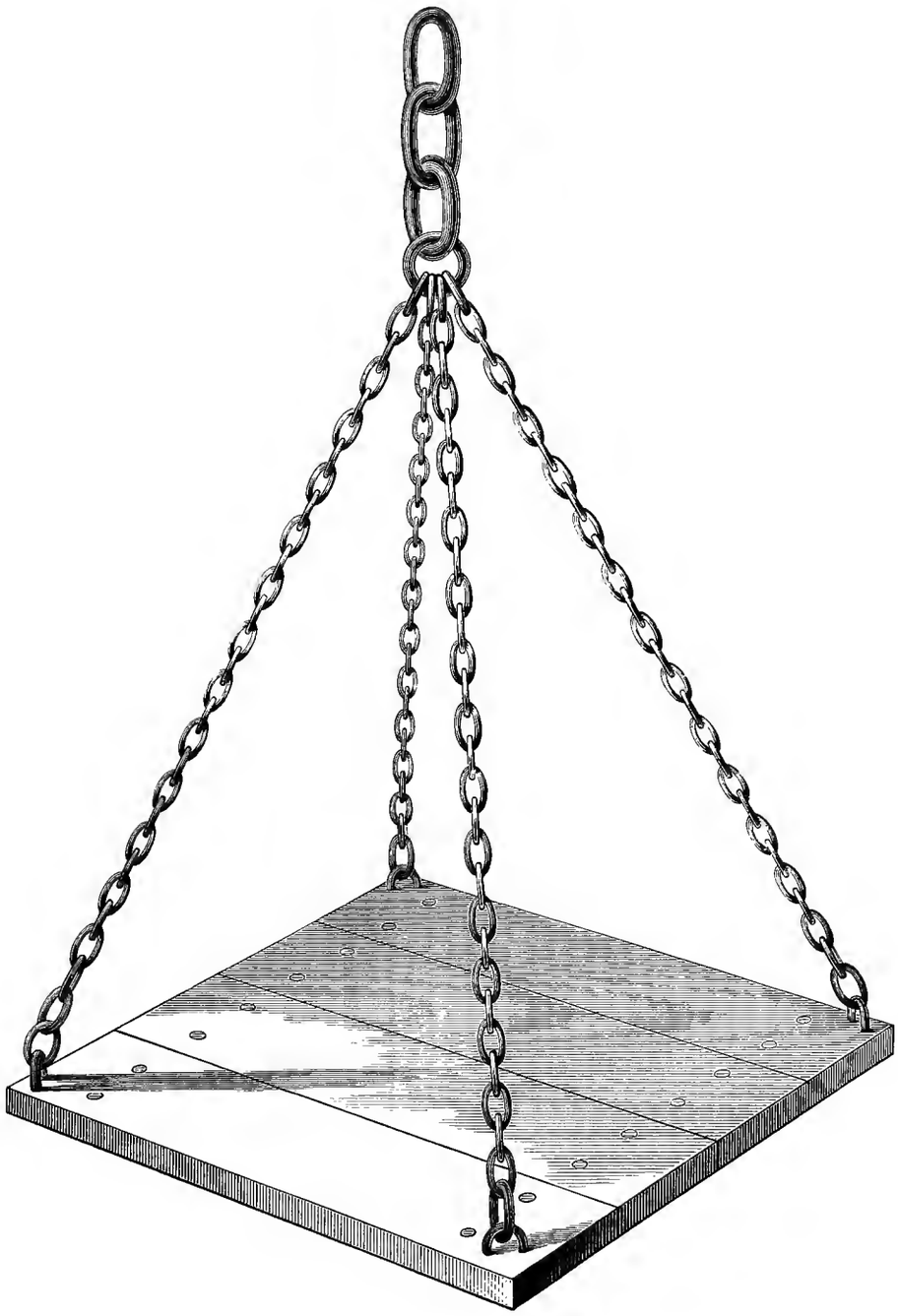
STANDING BOTTOM.

FAIRBANKS'

Square Bottom.

(HUNG WITH CHAINS.)

1st Size,	4	feet	Square		Price,	$18 00
2d "	3½	"	"		"	16 00
3d "	3	"	"		"	14 00



FAIRBANKS'

SQUARE BOTTOM.

(HUNG WITH CHAINS.)

FAIRBANKS'

Round Bottom, for Pork.

(HUNG WITH CHAINS.)

1st Size,	5	feet	Diameter		Price,	$36 00
2d "	4½	"	"		"	32 00
3d "	4	"	"		"	28 00

FAIRBANKS'

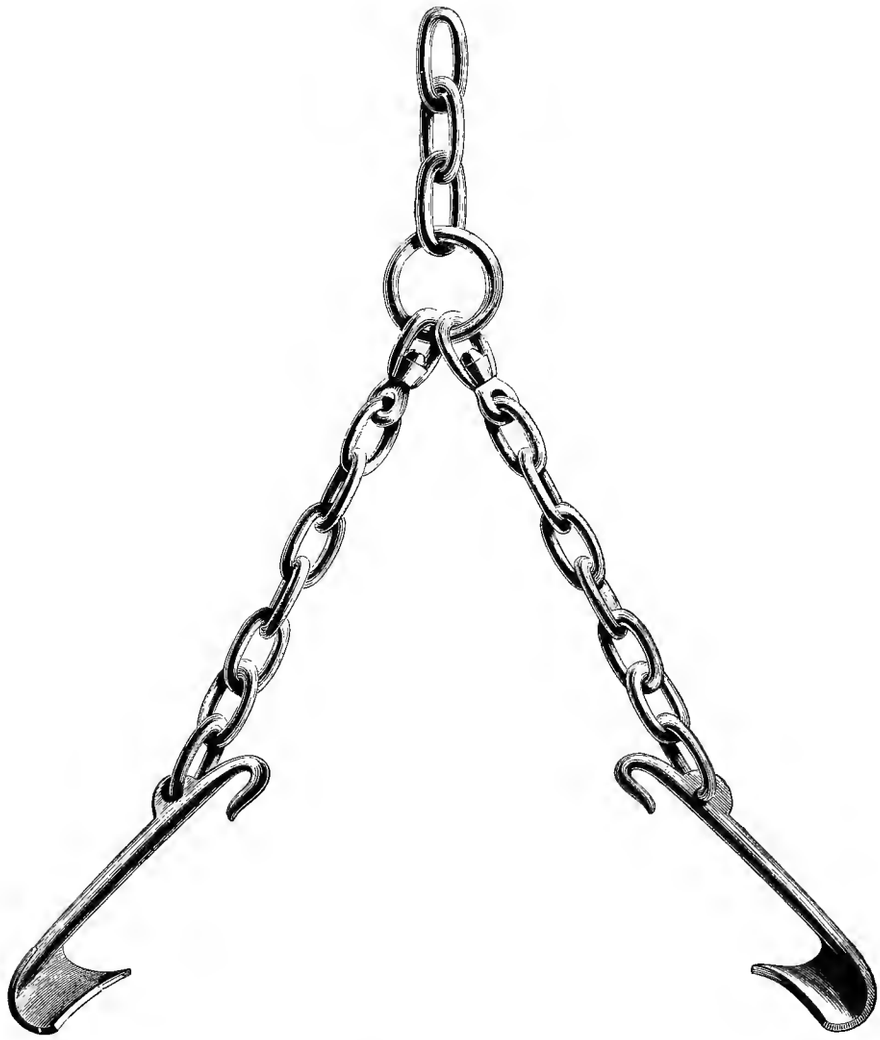
ROUND BOTTOM, FOR PORK.

(HUNG WITH CHAINS.)

FAIRBANKS'

Hogshead Hooks.

1st Size, Heavy, with Swivels	Price,	$11 00
2d " Light, " "	"	10 00
Sliding Can Hooks	"	16 50



FAIRBANKS'

HOGSHEAD HOOKS.

FAIRBANKS'

Barrel Hooks.

Ordinary Size, for Barrels	Price, $4 00
Large Size, for Tierces	" 5 00

FAIRBANKS'

Barrel Hooks.

FAIRBANKS'

Box Hooks.

Large Size, with Chain.... .... .Price, $5 50

Common Pattern.... .... " 4 50

Hay Hooks.

Hay Hooks..... .. ..Price, $5 00

Tobacco Hooks.

(OF STEEL.)

Suitable for Tobacco Boxes..... ....Price, $5 00

Tea Hooks.

(OF STEEL.)

Suitable for Chests of Tea..... ....Price, $5 00

FAIRBANKS'

Box Hooks.

FAIRBANKS'

Cotton Hooks.

New York Pattern, Plain and Light	Price,	$6 00
" " " with Swivel and Chain	"	7 00
Memphis or Savannah Pattern	"	7 00
New Orleans Pattern	"	8 00

FAIRBANKS'

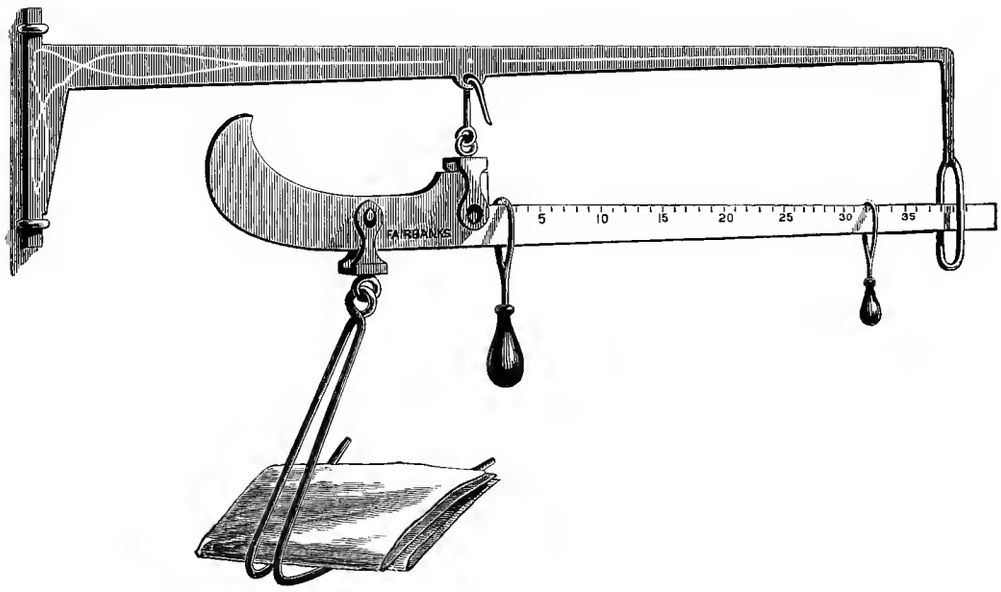
Cotton Hooks.

FAIRBANKS'

Paper Beam.

For determining the Number of Pounds to the Ream by the weight of One Sheet.

Price, Complete..... $6 75



FAIRBANKS'

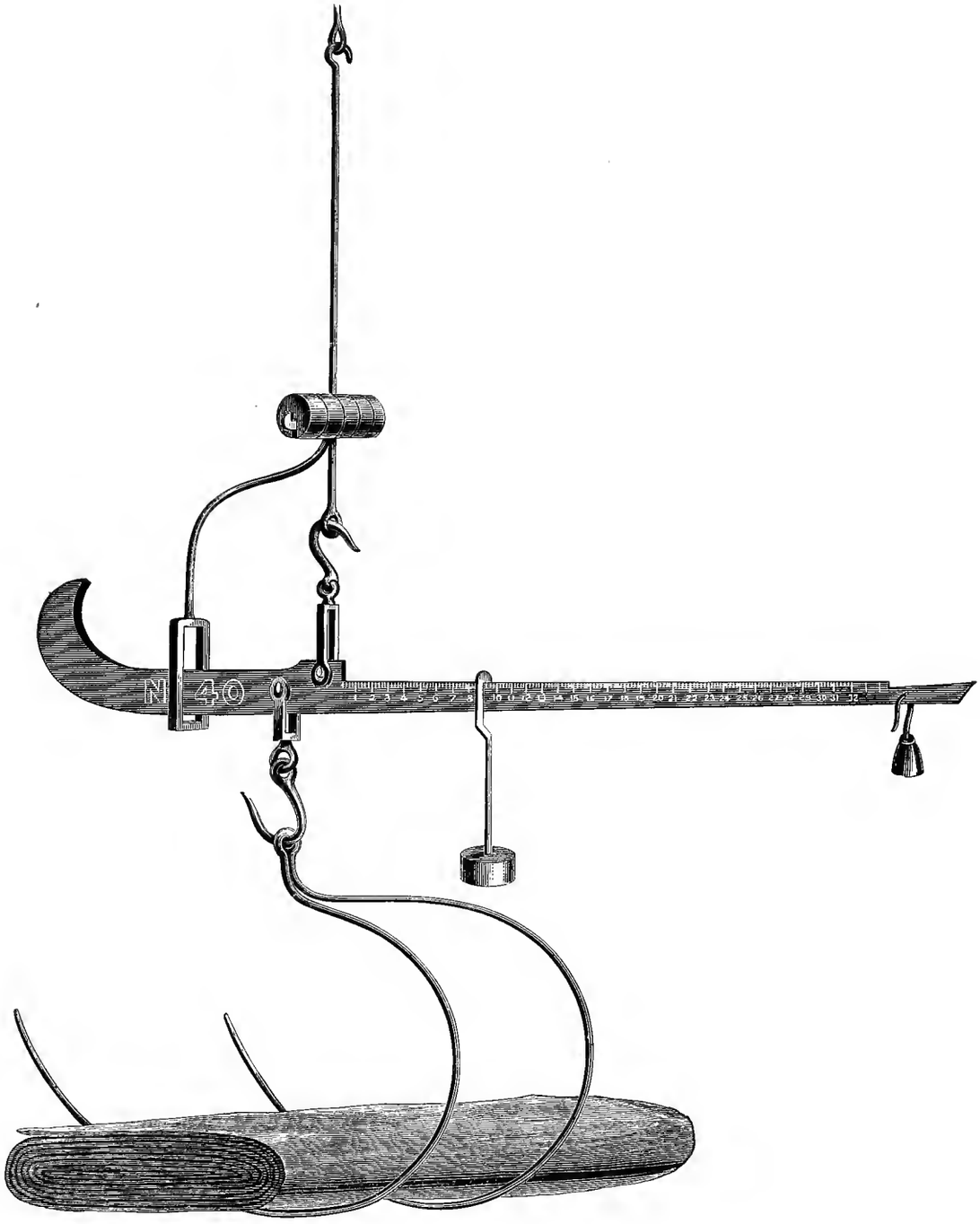
PAPER BEAM.

FAIRBANKS'

Cloth Beams.

For determining the Weight per Yard by weighing the Piece.

No. 34.	Capacity,	40	yards	Price, $12 50,	Single Width.
" 35.	"	40	"	" 14 50,	Double "
" 36.	"	50	"	" 14 00,	Single "
" 37.	"	50	"	" 16 00,	Double "
" 38.	"	70	"	" 15 00,	Single "
" 39.	"	70	"	" 17 50,	Double "
" 40.	"	80	"	" 16 00,	Single "
" 41.	"	80	"	" 18 50,	Double "



FAIRBANKS'

Cloth Beam.

FAIRBANKS'

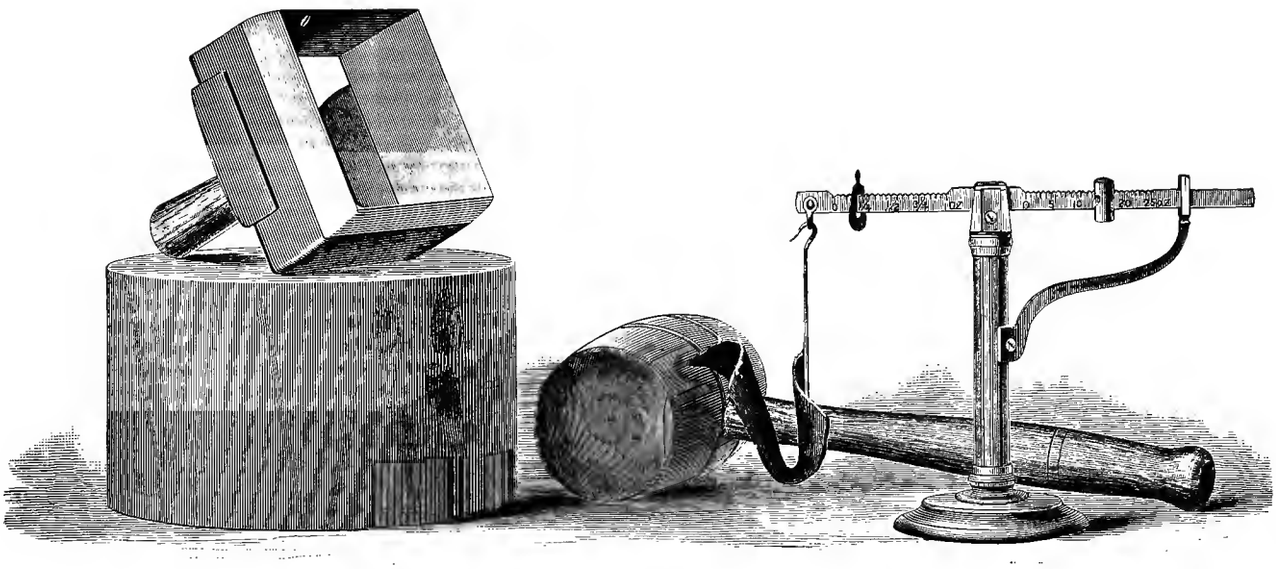
PATENT

Cloth Sample Balance.

Complete as shown in the Engraving..... ... ...Price, $25 00

The Engraving represents a Balance with the necessary tools for ascertaining the weight of cloth per square yard, by weighing a very small sample. These tools consist of a BALANCE, STEEL CUTTER, HARD-WOOD BLOCK AND MALLET. By laying the cloth on the BLOCK, and cutting out a sample with the STEEL CUTTER, (which is just one eighty-first part of a square yard), then weigh the sample on the Balance, which weighs down to grains, and indicates the weight of a square yard. From the weight per square yard, the calculation may be made for any width, or, by referring to the table of figures which accompanies the Balance, the weight per running yard of cloth from 18 to 60 inches wide, may be instantly ascertained.

This Balance will be found very useful for determining the value of goods, not only for the import duty, but for manufacturers and dealers, as well as for tailors and all persons who handle or deal in cloth of any description. With this Balance the relative weight of goods may be instantly ascertained by simply weighing the sample cut from one corner of the piece of goods.



FAIRBANKS'

PATENT

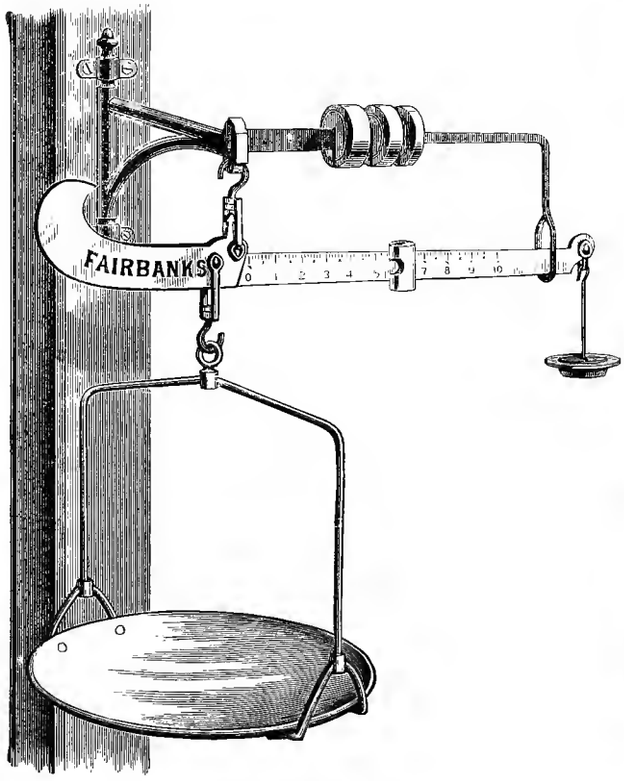
CLOTH SAMPLE BALANCE.

FAIRBANKS'

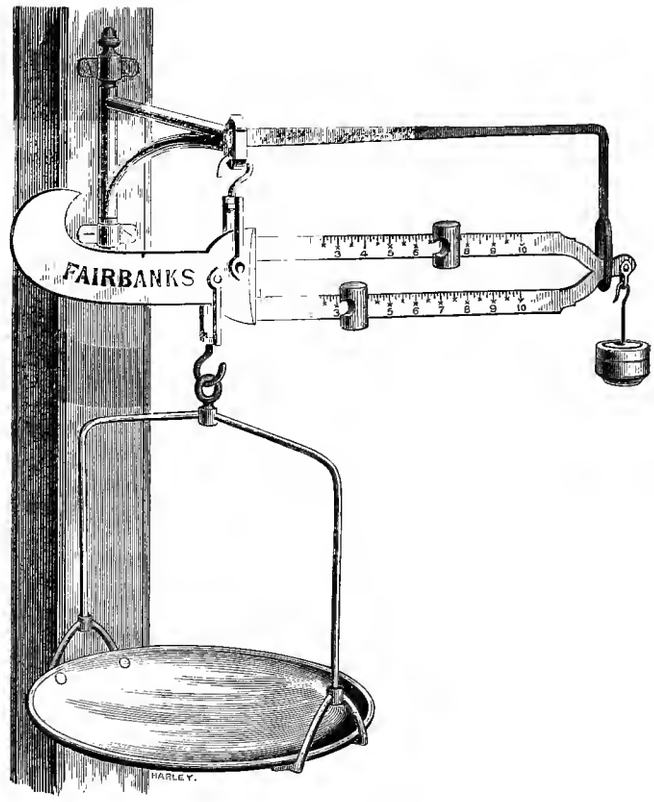
Boston Market Weighing Machines.

(WITH BRASS BEAM AND SLIDING POISE.)

Description.		Diameter of Pan.	Price, Single Beam. With all Brass Weights.	Price, Double Beam. With all Brass Weights.
Complete Weighing Machine with heavy copper pan tinned inside, and brass bails, weights and iron crane complete.	Capacity, 125 lbs.	18 in.	$25 00	$27 00
	" 100 "	15 "	21 00	23 00
	" 50 "	14 "	18 00	20 00



SINGLE BEAM.



DOUBLE BEAM.

FAIRBANKS'

BOSTON MARKET WEIGHING MACHINE.

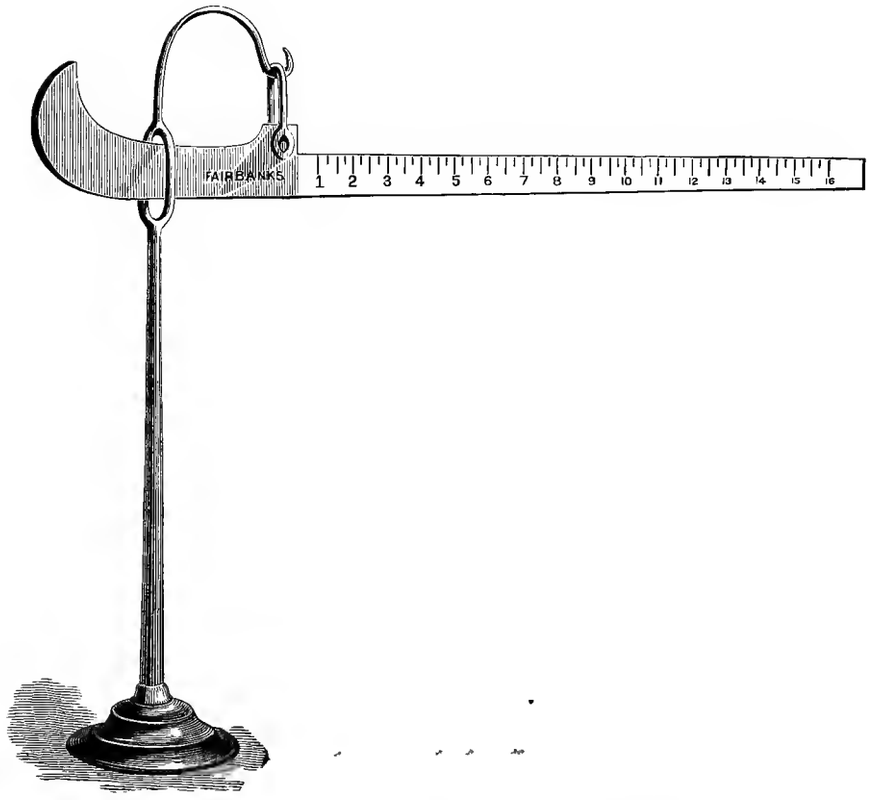
(WITH BRASS BEAM AND SLIDING POISE.)

FAIRBANKS'

Yarn Numbering Beam.

For determining the Number by weighing One Hundred Yards.

Price **$5 50**



FAIRBANKS'

YARN NUMBERING BEAM.

FAIRBANKS'

U. S. Standard Dry Measures.

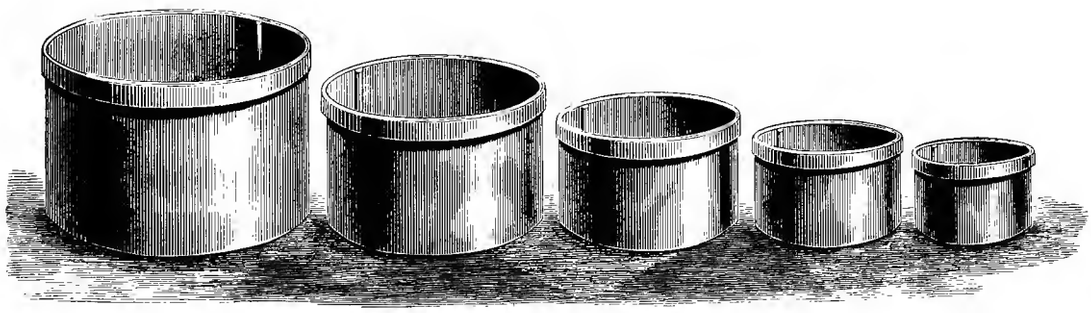
For State, County, City, or Town use, and adjusted to the Standard of the United States.

Extra Heavy Copper with Cast Brass Bottoms	½ bushel to 1 qt.	Price, per set,	$75 00
Made of Heavy Sheet Copper	½ " 1 "	" " "	60 00
Made of Cast Iron	½ " 1 "	" " "	50 00

FAIRBANKS'

U. S. Standard Liquid Measures.

Extra Heavy Copper with Cast Brass Bottoms, and without Handles,	1 gallon to 1 gill	Price, per set,	$60 00
Heavy Sheet Copper	1 " 1 "	" " "	35 00
Sheet Brass, Medium Weight	1 " 1 "	" " "	35 00
Cast Iron	1 " 1 "	" " "	30 00



FAIRBANKS'

U. S. Standard Dry Measures.

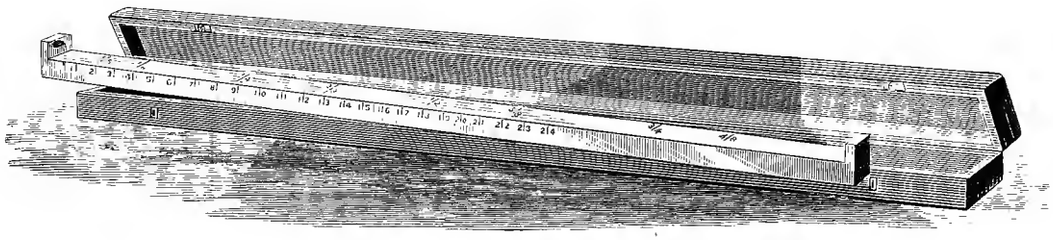
FAIRBANKS'

U. S. Standard Liquid Measures.

FAIRBANKS'

U. S. Standard Yard Measure.

All Brass..... ....Without Case, $18 00.. .... With Case, $22 00



FAIRBANKS'

U. S. Standard Yard Measure.

FAIRBANKS'

U. S. Standard Brass Weights.

(IN OPEN BLOCK.)

Capacity, 4 lbs. to $\frac{1}{16}$ oz.			Price,	$16 00
" 2 " $\frac{1}{16}$ "			"	10 50
" 1 " $\frac{1}{16}$ "			"	7 00

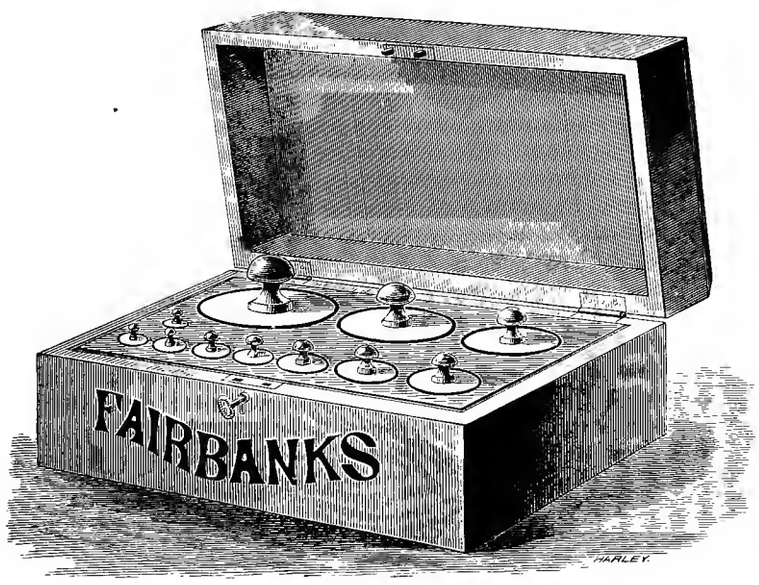
(IN COVERED BLOCK.)

Capacity, 4 lbs. to $\frac{1}{16}$ oz.			Price,	$18 00
" 2 " $\frac{1}{16}$ "			"	12 00
" 1 " $\frac{1}{16}$ "			"	8 00

(IN OPEN BLOCK.)

FAIRBANKS'

U. S. STANDARD BRASS WEIGHTS.



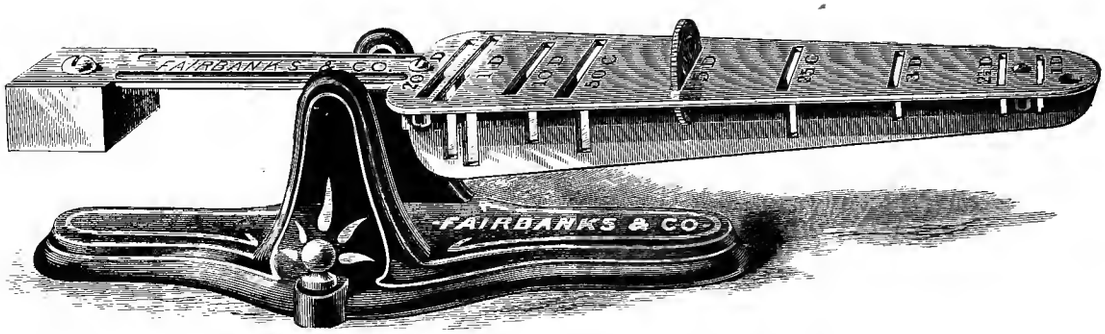
(IN COVERED BLOCK.)

FAIRBANKS'

Infallible Counterfeit Coin Detector.

(ADAPTED TO ALL U. S. COINS.)

Price..... $5 00



FAIRBANKS'

INFALLIBLE

COUNTERFEIT COIN DETECTOR.

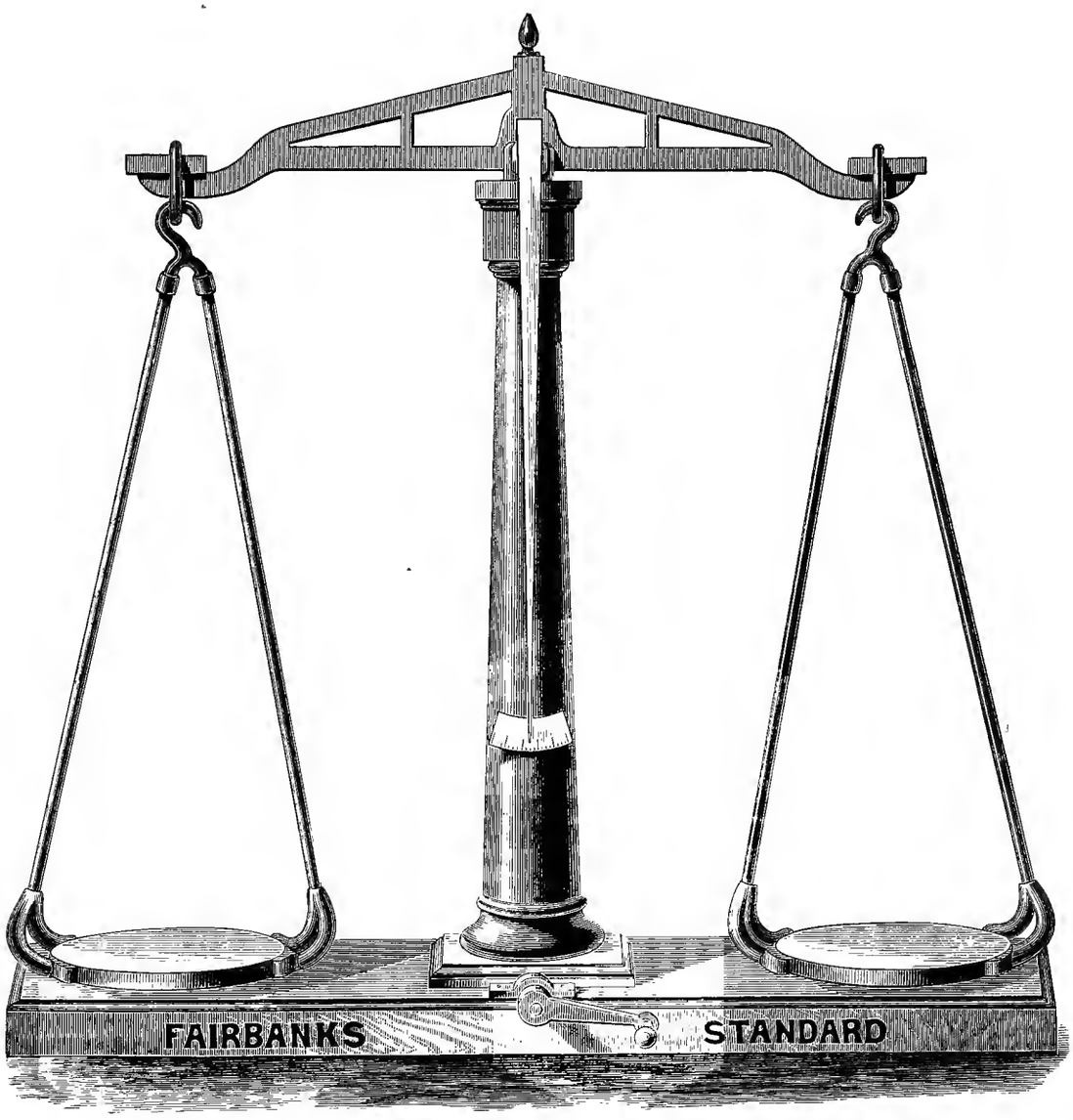
(ADAPTED TO ALL U. S. COINS.)

FAIRBANKS'

Town and City Sealers' Weighing Machines.

(MOUNTED ON BRASS COLUMN AND IRON BASE.)

Capacity, 100 lbs..... Price, $125 00



FAIRBANKS'

TOWN AND CITY SEALERS' WEIGHING MACHINE.

FAIRBANKS'

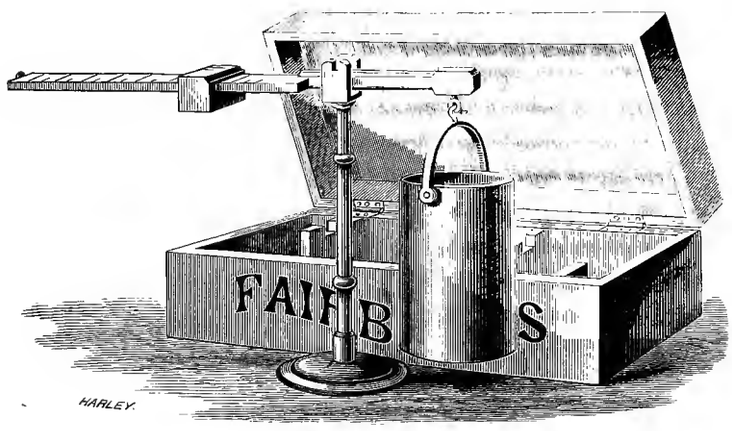
Grain Tester.

(IN BOX.)

Graduated so that by balancing a quantity of grain in the cup, the beam will designate exactly how many pounds it will weigh to the bushel.

Securely packed in a fine Walnut Case, 13 inches Long, 6 inches Wide, and 4½ inches High.

Price..... $22 00



FAIRBANKS'

GRAIN TESTER.

(IN BOX.)

FAIRBANKS'

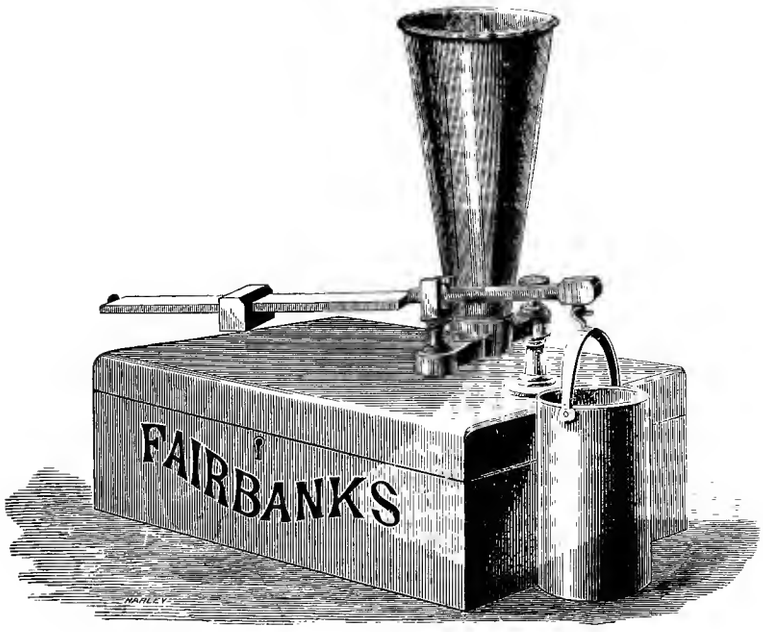
Grain Tester.

(IN CASE, WITH FILLER.)

Graduated so that by balancing a quantity of grain in the cup, the beam will designate exactly how many pounds it will weigh to the bushel.

Securely packed in a fine Walnut Case, 13 inches Long, 6 inches Wide, and 4½ inches High, with Brass Funnel for Filling.

Price.....$26 00



FAIRBANKS'

GRAIN TESTER.

(IN CASE, WITH FILLER)

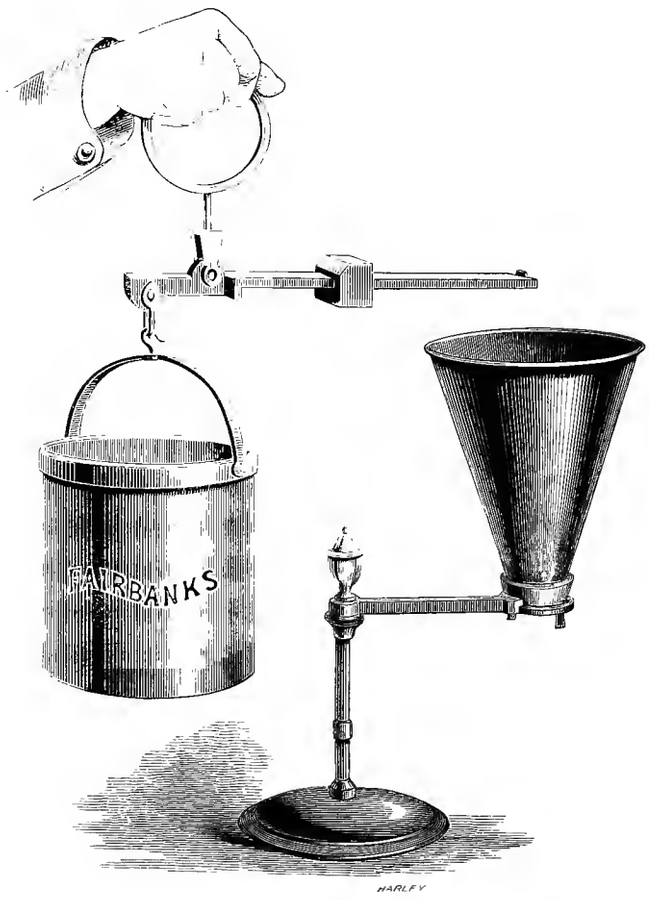
FAIRBANKS'

Grain Tester.

½ Pint Cup	Price,	$12 50
1 " "	"	13 00
1 Quart "	"	14 00
2 " "	"	15 00

BRASS FUNNEL, FOR FILLING.

1 Quart	Price,	$8 00
2 "	"	8 50



FAIRBANKS'

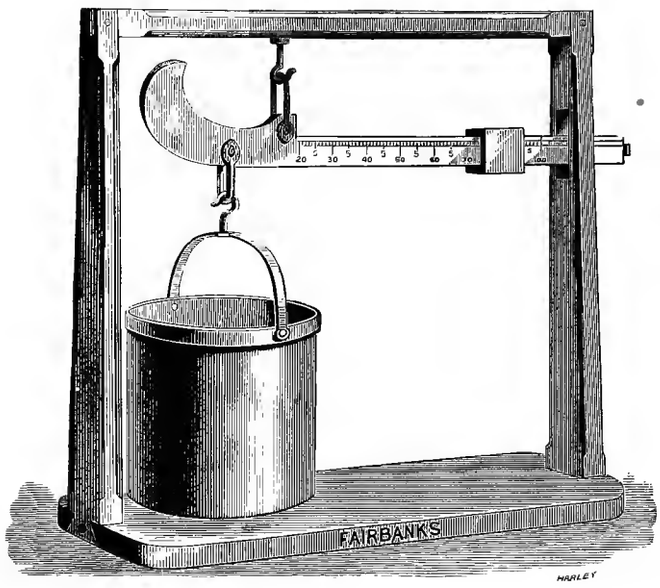
GRAIN TESTER.

FAIRBANKS'

Grain Tester.

(WITH FRAME.)

Two Quart Cup	Price,	$16 00
Extra for Brass Funnel, for Filling	"	8 50



FAIRBANKS'

GRAIN TESTER.

(WITH FRAME.)

FAIRBANKS'

IMPROVED

Grain and Seed Testing Machine.

This Testing Machine is designed to show:

1st. The weight per bushel by weighing an average sample of any lot of grain or seed. To do this, fill the dish carefully, and strike it off even, then weigh it, reading on the scale beam from the line of figures marked "lbs. per bushel."

2d. To determine the per cent. of dirt or foul matter in an average sample to be tested. To do this, fill the dish and weigh 4 lbs. of the sample to be tried, reading on the beam from the center line of figures. If the dish, crowded full, does not weigh 4 lbs., then weigh twice so you have *just* 4 lbs.

Take this lot and clean it carefully. When thoroughly cleaned weigh the grain or seed, reading from the line of figures marked "per cent. of 4 lbs." and this will show what per cent. of the sample is pure clean grain or seed. Or the dirt and foul matter can be weighed in the same manner, and the result will show the per cent. of loss in dirt and foul matter.

In weighing to determine the pounds per bushel care must be taken to not shake down, or crowd the grain into the dish; fill it carefully and strike off even.

½ Pint Cup	Price,	$12 50
1 " "	"	13 00
1 Quart "	"	14 00
2 " "	"	15 00

FAIRBANKS'

IMPROVED

GRAIN AND SEED TESTING MACHINE.

FAIRBANKS'

Cement Testing Machine.

Price..... $30 00

The Engraving represents a Testing Balance, which seems to be all that is required for making ordinary tests of the tensile strength of cement.

It has a capacity of 200 lbs. and the moulds are made for specimens of one square inch. This Tester is used for comparing the strength of different brands of cement, by most of the City Departments of New York and Boston, by the Brooklyn Bridge Co., the New York Elevated R. R. Co., U. S. Government and by many of the consumers of cement throughout the country. For a good, reliable article, it is the cheapest Machine in the market for testing cement. It gives general satisfaction wherever it is used, and we have never had any complaint made of its work.

We sell the Machine with one mould or form for making the brick or specimen, for $30 00. Extra moulds made of cast iron and galvanized, $2 00 each. The following is a description of the Machine and mode of operating it: Referring to the letters shown in the engraving:

A—Is a brass beam with steel pivots, multiplication 10 to 1.
B—Is a balance Ball for balancing the specimens.
C—Is a swivel hook which holds upper clamp.
DD—Are clamps for holding the specimen *F*.
E—Is the lower hook which can be adjusted to fit the specimen.
F—Specimen which has a section exactly 1 inch square.
G—Is a cast iron standard to support the beam.
H—Is a cast iron standard with brass loop on top.
J—Is brass loop for beam to work in.
K—Is a screw for hoisting or lowering the beam.
L—Is a hand wheel which works the screw *K*.
M—Is a hard wood base 2x9 in. and 3 ft. long.
N—Cast iron legs to support base *M*.
P—Is a tin pan for holding shot or sand.
R—Is a spring balance scale arranged to show the strain on the specimen.
S—Mould ready to be filled with cement.
T—Mould as taken off the specimen.
U—Specimen ready for testing.
V—Specimen after having been tested.

DIRECTIONS FOR USING.

Lay the mould flat on a board and fill it with cement, then strike or scrape it off even with the top. When it is set or hardened sufficiently, take the mould off by opening it at the ends and place the specimen *F* in the clamps *DD*. Turn the hand wheel *L* until the beam *A* rises to *near* the top of the loop *J*. Then pour fine shot or sand in the pan *P* until the specimen breaks. The dial *R* will then show what the strain was on the specimen when it broke.

We keep *these* Machines is stock, and can ship them at any time. When larger Machines are wanted, we make this style to order capable of standing 1,000 lbs.

The weight of this Machine all complete is 45 lbs.

FAIRBANKS'

STANDARD SCALES,

MANUFACTURED BY

E. & T. FAIRBANKS & CO.,

ST. JOHNSBURY, VERMONT.

PRINCIPAL WAREHOUSES.

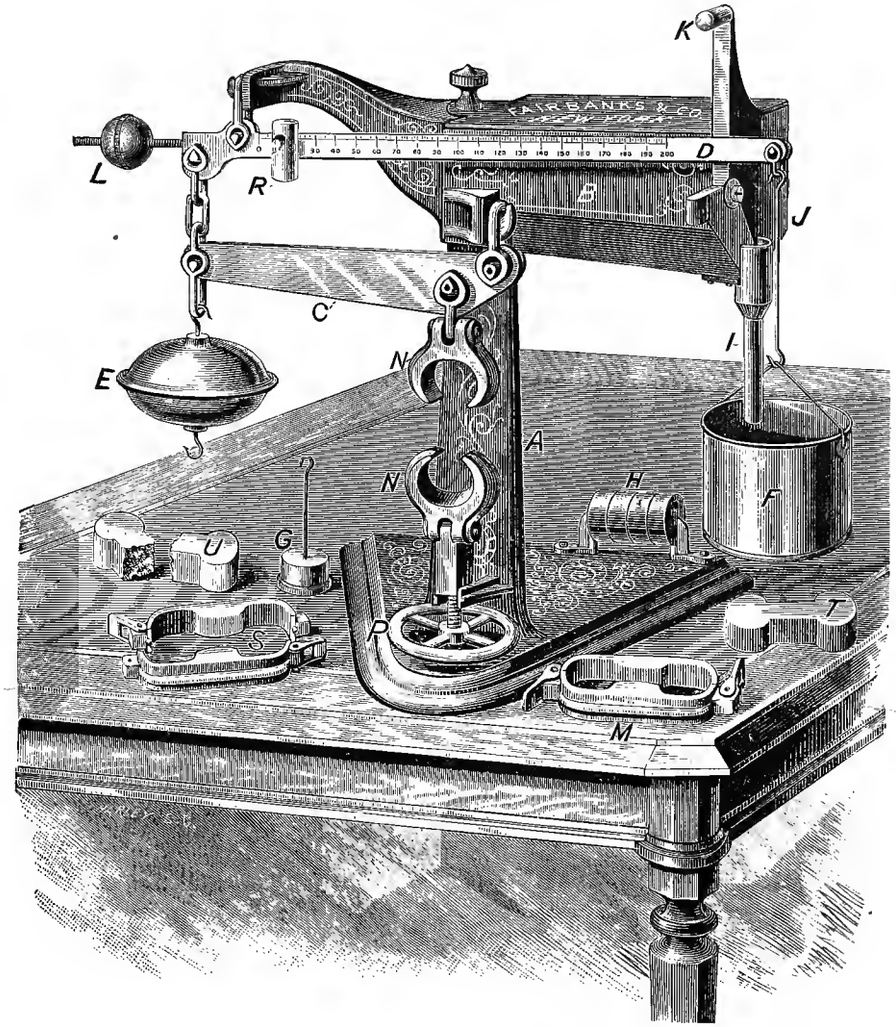
FAIRBANKS & CO., 311 Broadway, N. Y.
FAIRBANKS & CO., 17 Light Street, Baltimore, Md.
FAIRBANKS & CO., 53 Camp Street, New Orleans, La.
FAIRBANKS & CO., 216 Main Street, Buffalo, N. Y.
FAIRBANKS & CO., 382 Broadway, Albany, N. Y.
FAIRBANKS & CO., 377 St. Paul Street, Montreal.
FAIRBANKS & CO., London, England.
FAIRBANKS & CO., 715 Chestnut Street, Philadelphia, Pa.
FAIRBANKS & CO., 48 Wood Street, Pittsburgh, Pa.
FAIRBANKS & CO., 302 & 304 Washington Avenue, St. Louis, Mo.
FAIRBANKS & CO., 381 Blake Street, Denver, Col.
FAIRBANKS & CO., 26 South Meridian Street, Indianapolis, Ind.
FAIRBANKS, BROWN & CO., 83 Milk Street, Boston, Mass.
FAIRBANKS, MORSE & CO., Cor. Lake St. & 5th Ave., Chicago, Ills.
FAIRBANKS, MORSE & CO., 125 Walnut Street, Cincinnati, O.
FAIRBANKS, MORSE & CO., 103 Superior Street, Cleveland, O.
FAIRBANKS, MORSE & CO., 5th & Main Street, Louisville, Ky.
FAIRBANKS, MORSE & CO., 66 East 3d Street, St. Paul, Minn.
FAIRBANKS & HUTCHINSON, 401 Market Street, San Francisco, Cal.

FAIRBANKS'

AUTOMATIC

CEMENT TESTING

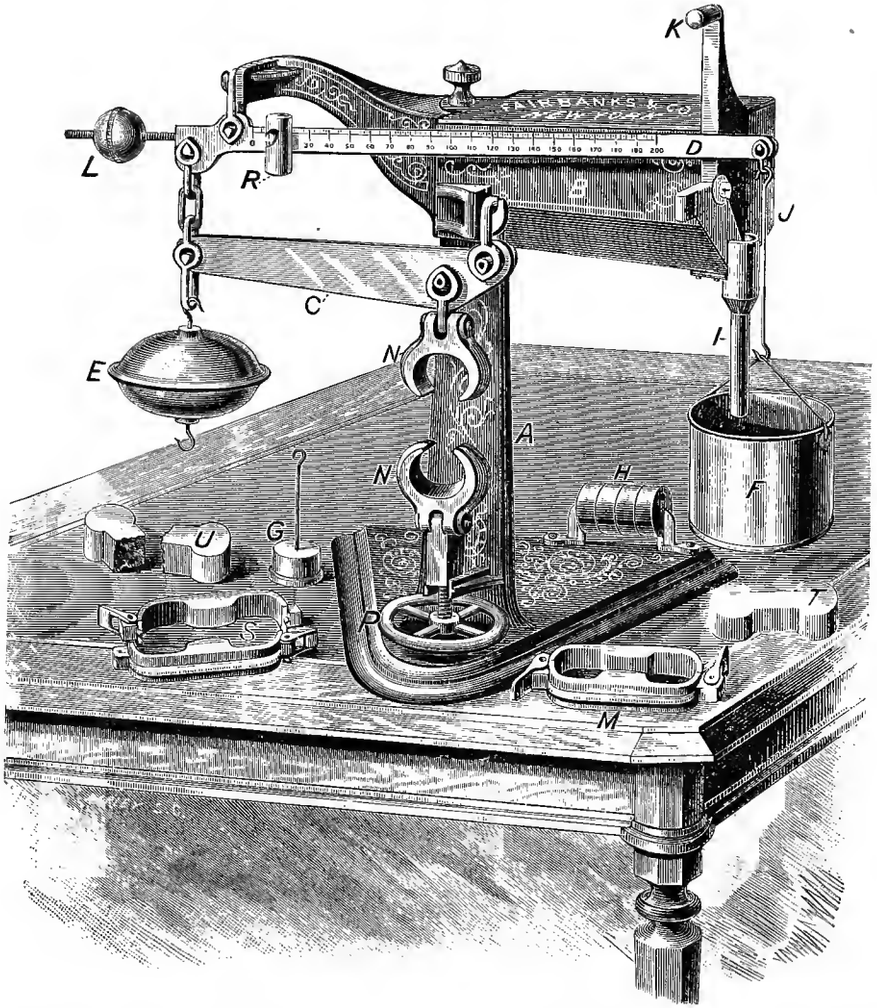
MACHINE, No. 5.



CAPACITY, 1000 LBS. SIZE, 22×9 INCHES.

(PATENT APPLIED FOR.)

No. 5.



The above engraving illustrates a **CEMENT TESTER,** *which we offer to the public as the best in the market, for the following reasons: It has no Springs or Hydraulics to get out of order, but is constructed with Levers and Pivots, strictly on the principle of the most Improved Weighing Apparatus. It is so compact that it may be placed on a small table or shelf in any office. The action is strictly Automatic, and requires no handling while the test is being made, thereby avoiding danger in sudden jarring, which might break the specimen before its strength is reached.*

WE WARRANT IT IN EVERY PARTICULAR.

DESCRIPTION.

A—Cast Iron Column.
C—Main Weighing Lever.
D—Graduated Weighing Beam.
R—Poise on Weighing Beam.
G—Brass Counterpoise Weight.
H—Weights to use on Counterpoise.
L—Small Brass Balance Ball.
E—Large Brass Balance Ball.
F—Brass Cup to hold Shot.
B—Hopper to hold Shot.
I—Brass Tube to conduct Shot.
J—Automatic Valve to close Shot Hopper.
K—Stop to prevent Beam from going too high.
NN—Clamps to hold Specimen.
P—Hand Wheel to take up slack.
M—Brass Mould to make Specimens in.
S—Mould when open.
T—Specimen before test.
U—Specimen after test.

DIRECTIONS FOR USING.

To make the specimen, lay the Brass Mould on a smooth board, fill it with cement and strike it off even on top. When hard enough, loosen the fastenings at the ends of the mould and carefully take the mould away from the specimen. Hang the Cup **F** on the end of the Beam **D**, as shown in the illustration. See that the Poise **R** is at the zero mark, and balance the Beam by turning the Ball **L**.

Place the shot in the Hopper **B**, place the specimen in the Clamps **NN** and adjust the Hand Wheel **P** so that the Graduated Beam **D** will rise nearly to the Stop **K**. Open the Automatic Valve **J** so as to allow the shot to run slowly. Stand back and leave the machine to make the test.

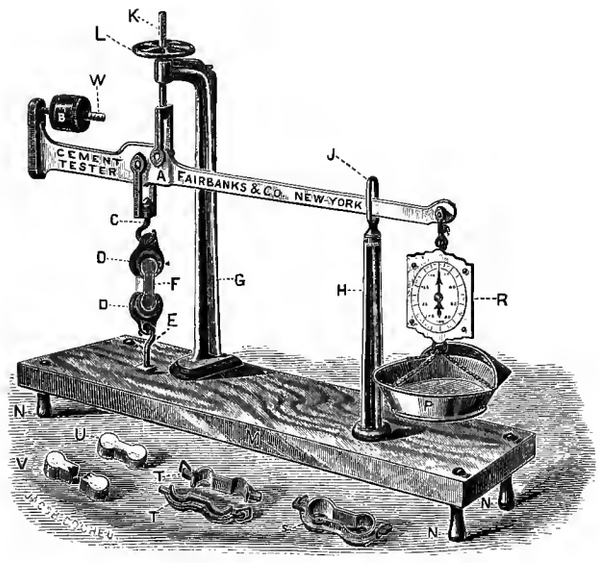
When the specimen breaks, the Beam **D** drops and closes the Valve **J**. Remove the Cup with the shot in it and hang the Counterpoise Weight **G** in its place. Hang the Cup **F** on the hook under the large Balance Ball **E**, and proceed to weigh the shot in the ordinary way, using the Poise **R** on the Graduated Beam **D** and the Weights **H** on the Counterpoise Weight **G**. The result will show the number of pounds required to break the specimen.

The Mould accompanying the Machine forms a specimen having one square inch Cross Section, but Moulds of different shapes and sizes will be furnished to order.

Price of Machine complete, with one Brass Mould, boxed and shipped, $ 160 10%

Price of extra Brass Moulds, each . . . . . $ 50 "

Com. 21%



FAIRBANKS'

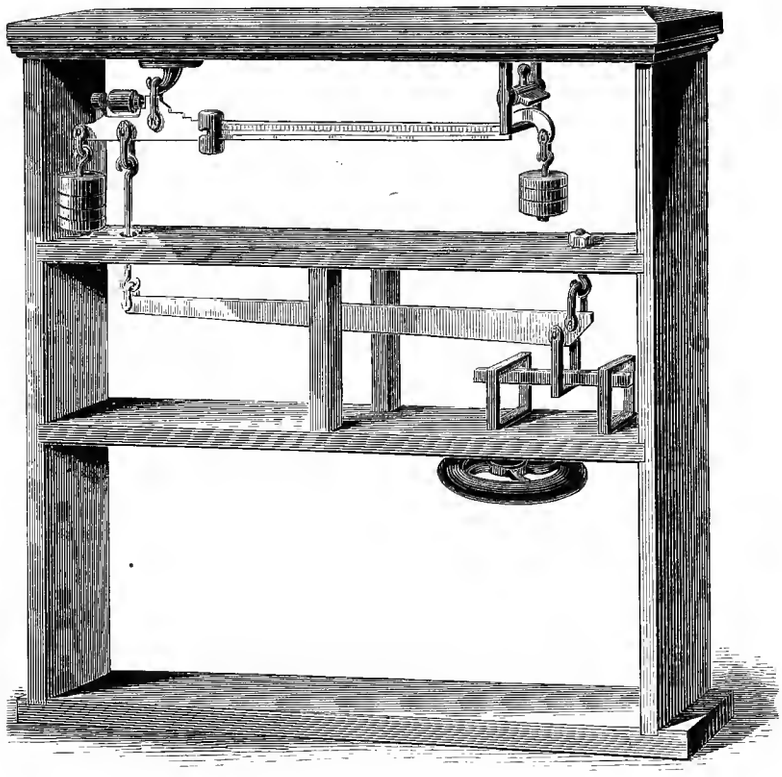
CEMENT TESTING MACHINE.

FAIRBANKS'

Machine for Testing Cast Iron Bars.

Price.... ... .$100 00

For use in foundries to ascertain the strength of different compositions cast iron.



FAIRBANKS'

MACHINE FOR TESTING CAST IRON.

FAIRBANKS'

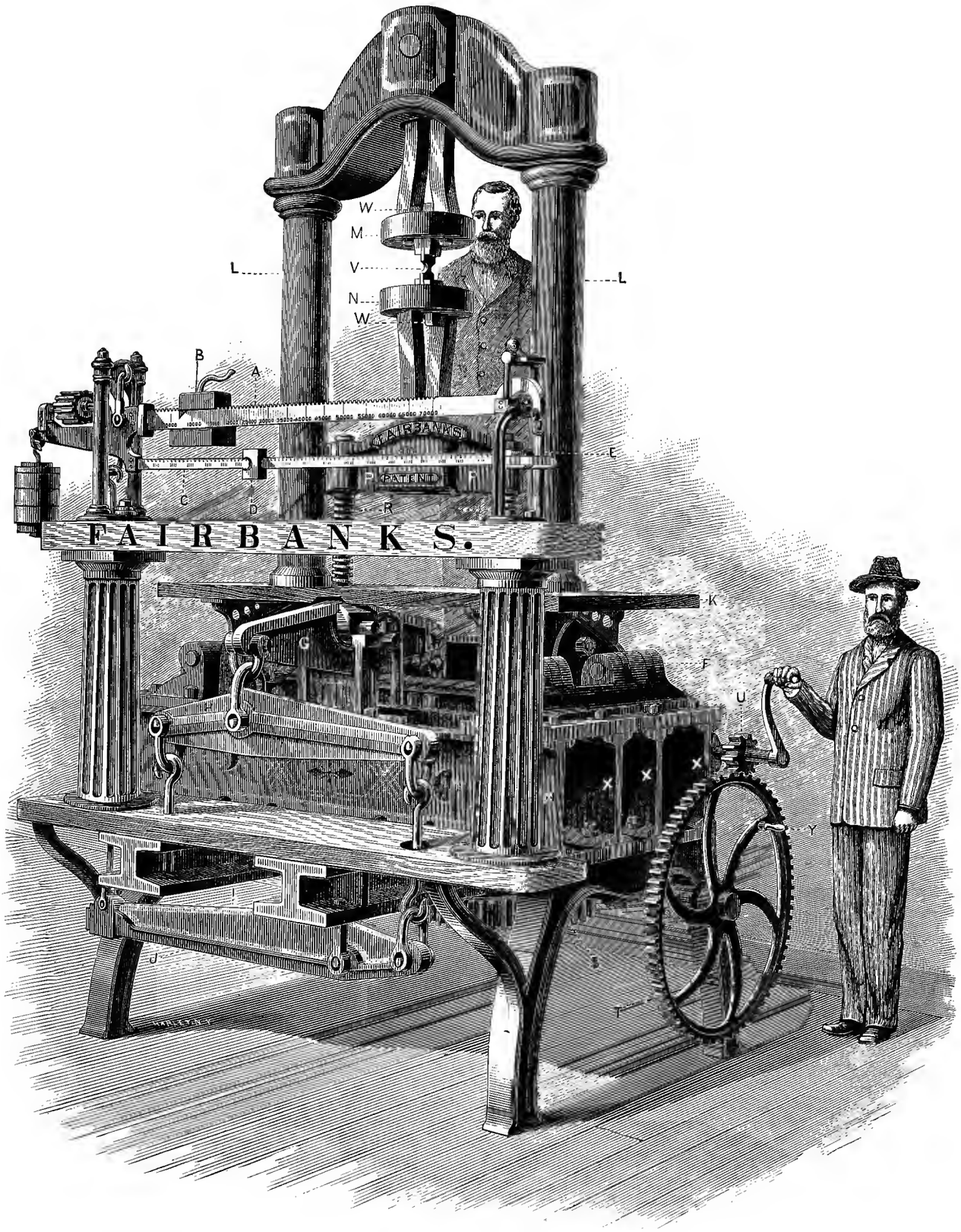
Improved Platform Testing Machine.

FOR TESTING THE STRENGTH OF METALS

In Use by the United States Government.

Prices furnished on application.

Estimates will be made, and contracts are solicited on all kinds of special testing contrivances.

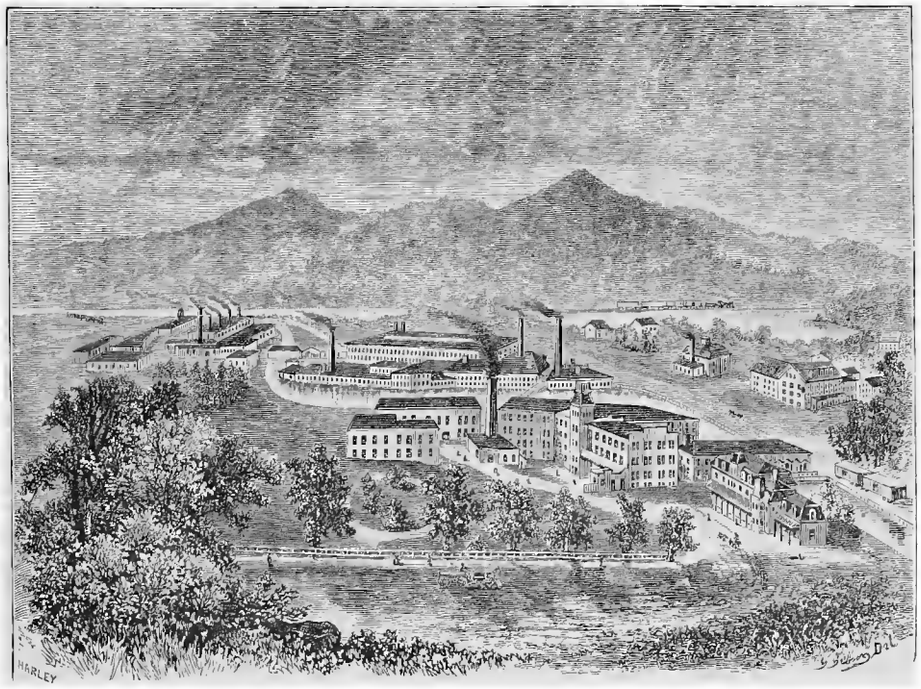


FAIRBANKS'
IMPROVED PLATFORM TESTING MACHINE.
(IN USE BY U. S GOVERNMENT.)

FAIRBANKS'

SCALE FACTORY.

1830.



FAIRBANKS'

SCALE FACTORY.

1878.

FAIRBANKS' WEIGHING MACHINES

RECEIVED

HIGHEST MEDALS

AT THE

WORLD'S FAIR, London,	1851.
WORLD'S FAIR, New York,	1853.
WORLD'S FAIR, Paris,	1867.
WORLD'S FAIR, Vienna,	1873.
WORLD'S FAIR, Santiago,	1875.
WORLD'S FAIR, Philadelphia,	1876.
WORLD'S FAIR, Paris,	1878.
WORLD'S FAIR, Sydney, N. S. W.,	1879.
WORLD'S FAIR, Melbourne,	1880.
MATANZAS EXPOSITION, Island of Cuba,	1881.

United States Centennial Commission,

INTERNATIONAL EXHIBITION, PHILADELPHIA, 1876.

THE UNITED STATES CENTENNIAL COMMISSION

HAS AWARDED

FOUR MEDALS and FOUR DIPLOMAS

TO

E. & T. FAIRBANKS & CO.,

ST. JOHNSBURY, VERMONT.

(The Only Weighing Machine Exhibitors upon whom these United Honors were conferred.)

Group XXV,	Machinery Hall,	Medal and Diploma.
Group XXIII,	Agricultural Hall,	Medal and Diploma.
Group IV,	Brewers' Hall,	Medal and Diploma.
Special Group,		Medal and Diploma.

Report.

For Originality in Design,
Excellence of Construction,
Quality of Workmanship and Materials,
Accuracy and Durability.

The Exhibit of **Fairbanks & Co.** *comprises a great variety of forms and sizes of Scales, adapted to every branch of business, such as Railway-Track, Wagon, Stock, Coal, Miners', Dormant and Portable Platform, Grocers', Counter, Druggists' and Post Office Scales, Weigh-masters' Beams and Testing Scales.*

The construction of all is excellent in plan and execution, insuring sensibility and endurance.

J. E. HILGARD.
(Signature of the Judge.)

Approval of Group Judges.

JAMES C. WATSON, J. SCHIEDMAYER, ED. FAVRE PEYRET,
P. F. KUPKA, F. A. P. BARNARD, H. K. OLIVER.

A true copy of the record.

FRANCIS A. WALKER,
Chief of the Bureau of Awards.

Given by authority of the United States Centennial Commission.

A. T. GOSHORN, *Director General.*

[SEAL.]

J. R. HAWLEY, *President.*

J. L. CAMPBELL, *Secretary.*

The following letter from Tokio, Japan, gives official notice of the adoption by the Japanese Government of the Fairbanks' Standard Scales:

(Copy.)

No. 195. *General Post Office,*

Tokio, Japan, March 20th, 1876

Messrs. Fairbanks & Co.,

311 Broadway,

New York.

Gentlemen:

On the first day of January, 1875, your Scales were introduced into the postal service of this country, and since that time the number in use has been constantly increasing, it being found that they are what is claimed for them, a standard Scale. It is, therefore, a source of great satisfaction to this department to be able to add its testimony to the volume already written in just praise of "Fairbanks' Standard Scales."

I have the honor to be, gentlemen,

Your very obedient servant,

(Signed.) *H. Mayesima,*

Postmaster General.

The following letter from the Postmaster General gives official notice that the United States Government recognizes the Fairbanks Scale as the standard:

(Copy.)

Post Office Department,
Washington, D. C., March 15th, 1878.

Messrs. Fairbanks & Co.,
New York City.

Gentlemen.

I take great pleasure in stating that your Scales or Balances have been for several years, and are now, in use in all the Post Offices of the United States; and in repeated tests that we have made of them, we find they are not only accurate, but well adapted to the service they have to perform.

Very Respectfully, &c.,

(Signed.) *D. M. Key,*
Postmaster General.

N. B.—Number of Post Offices in the United States, 38,876.

HONORS

CONFERRED UPON

THADDEUS FAIRBANKS

THE INVENTOR OF

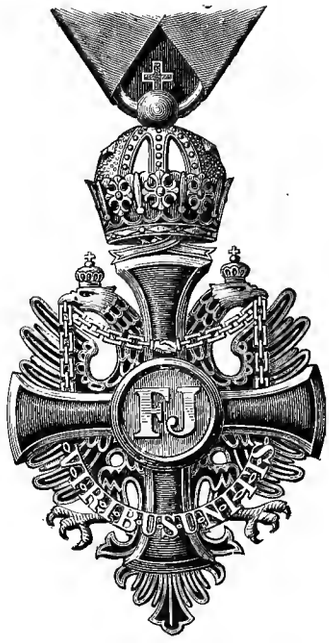
FAIRBANKS'

Standard Weighing Machines.

FROM THE CHANCERY

OF THE

Imperial Austrian Order of Francis Joseph.



To the Mechanical Constructor,

MR. THADDEUS FAIRBANKS.

WELL BORN:

His Imperial and Royal Apostolic Majesty, hath, by His Most Sovereign Letters, of the 27th of October, 1873, most graciously conferred upon Mr. Thaddeus Fairbanks, Mechanical Constructor, the Knightly Cross of the Imperial Order of Francis Joseph.

The Chancery of the Order has the honor to enclose the appropriate decoration.

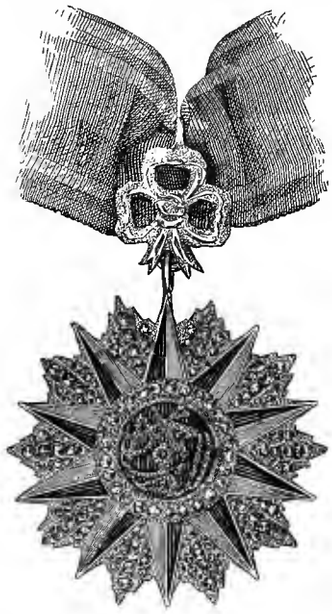
BARON VON LICHTENFELS,

Chancellor of the Order.

VIENNA, AUSTRIA,
1873.

FROM

THE BEY OF TUNIS.



The Bey of Tunis has conferred upon Thaddeus Fairbanks, the Inventor of Fairbanks' Weighing Machines, the Decoration and Diploma of

NISHAN EL IFTIKAR

OF

Grade of Commander,

The only American Manufacturer upon whom the honor has been conferred.

DIPLOMA.

FACSIMILE IN ARABIC.

الحمد لله وحده

١٢٩١

من عبد الله سبحانه المتوكل عليه المفوض

جميع الامور اليه المشير محمد الصادق باشا

باي صاحب المملكة التونسية الى الموفق المحترم الصيورتاجيوس فيرباي

بنكس مخترع الة للوزن تدعى فيرباي بنكس سلاميلس وصافقها اما بعد فانه

بمقتضى مكتوب وزير الحربية ووزير الامور الخارجية فيما لكم من الثناء وجبنا

لكم هذا النيشان المكرم بإسمنا وهو من الصنف الثاني من نيشان الافتخار

رسمنا بإهداله باسمنا والعاليه وكتب في ٢٧ ربيع الاخر ١٢٩٤ اثنان اربع

وثمانين ومائتين والف

TRANSLATION.

No. 1291.

Praise to God alone!

From the servant of God (may his name be glorified) who relies on Him and leaves to Him all his earthly affairs,

Mohammed es Sadok Pasha Bey,

Possessor of the Kingdom of Tunis,

To the Honorable and Honored,

Mr. Thaddeus Fairbanks,

Inventor and maker of the Fairbanks Scale,

In compliance with the request of Our Prime Minister and Minister of Foreign Affairs, and on account of the merits which distinguish you—We send you this decoration, ornamented with Our name and which is of the second class (Commander) of Our order Iftikar.

May you wear it in peace and prosperity!

Written the 27th Rabia el Ahaud 1294 (March 22d, 1877.)

Kheradine,

Prime Minister & Minister of Foreign Affairs

DIPLOMA.

CERTIFICATE IN SIAMESE.

๏ หนังสือนี้เป็นพระยานิกรบดีทำขึ้นแปลแบบนั้น ได้เรียกมาใช้ในโรงทำ
ตวงของไทยหลายปีแล้ว ก็มีความชำนิชำนาญเป็นพอใจที่ ไม่
ได้ไม่สิ้นรักกลับเอาเงินทำนั้น ไปใน ๆ ที่เป็นแล้วก็ทำเสียหายแต่ที่ใน
สินค้า ได้เรียกมีทุกวัน ทั้งแต่ปีที่ตวงมาปีหนึ่งนั้นแล้ว ได้
รับประมาณ ๕..... ทาน ถ้าเอาทำขึ้นสิ่งนี้
ไม่ได้ทั้งสิ้น ๑๓ ๑๕

COMMISSIONER OF CUSTOMS BANGKOK

ENGLISH TRANSLATION.

This is to certify that Fairbanks' scales have been used at H. S. M's Custom house for many years and have given every satisfaction, especially so far as durability is concerned, as it is almost a wonder that they are not broken and smashed long ago, considering the rough usage they are getting on board of boats, lighters, sailing ships, steamers, on wharfs and in ware houses, where they have to be transported daily, having for instance weighed about five millions of piculs Rice last year with only about a dozen scales and without one accident

Bangkok Nov. 14th 1877.

COMMISSIONER OF CUSTOMS BANGKOK

THE FOLLOWING

ARE

LEADING MANUFACTURERS

OF THE

UNITED STATES.

HARTSHORN'S

SELF-ACTING SHADE ROLLERS

FOR STORES, DWELLINGS, CARS, CARRIAGES, STEAMERS, &c.

USED IN UNITED STATES GOVERNMENT BUILDINGS.

SOLD ALL OVER THE WORLD.

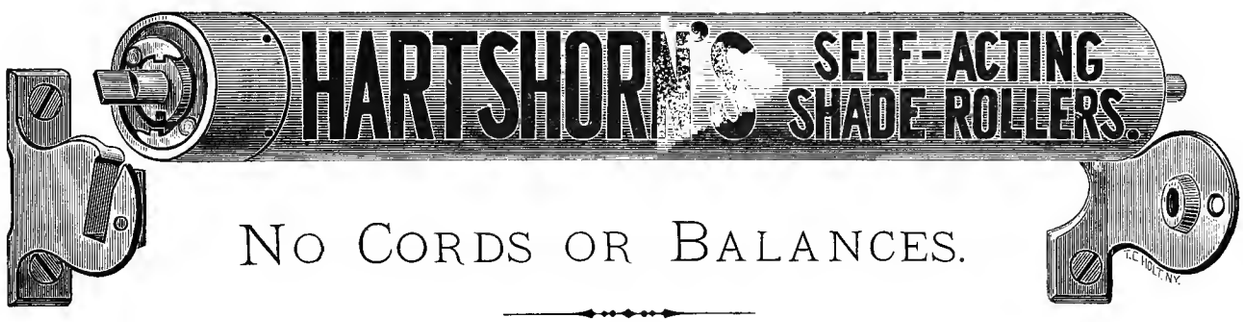
Carry Shades of all Sizes, Shapes and Weight,

DO NOT GET OUT OF ORDER.

ALL ROLLERS WARRANTED.

First Degree of Merit, World's Fair, Melbourne, 1880, and Gold Medal, World's Fair, Adelaide, 1881.

First Award, Cotton Exposition, Atlanta, Ga., 1881.



These Shade Rollers have been for fourteen years in use in the better class of stores and dwellings in the United States, and are also largely in use in railway cars and road carriages, and have given the fullest satisfaction. They have received the highest awards in their class wherever exhibited, including World's Fair in Chili, 1875; Philadelphia, 1876; Paris, 1878; Melbourne, 1880; Adelaide, 1881. They do away entirely with the clumsy contrivances of cords, balances, weighted rods, etc., formerly in use. They will fit windows of any size or shape, and are warranted to last at least five years.

PRICE LISTS AND MODELS FREE.

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WELCH CLOCKS.

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NICKEL.

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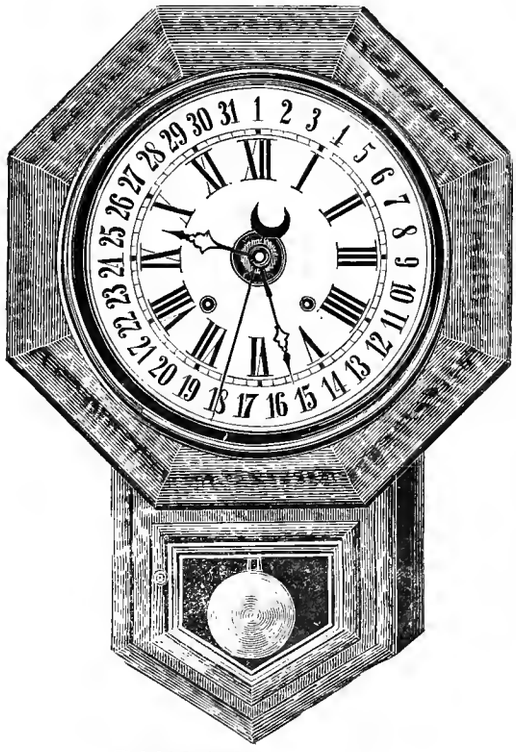

Height 24 inches. 12 inch Dial.
Eight Day. Time.
Eight Day. Strike.

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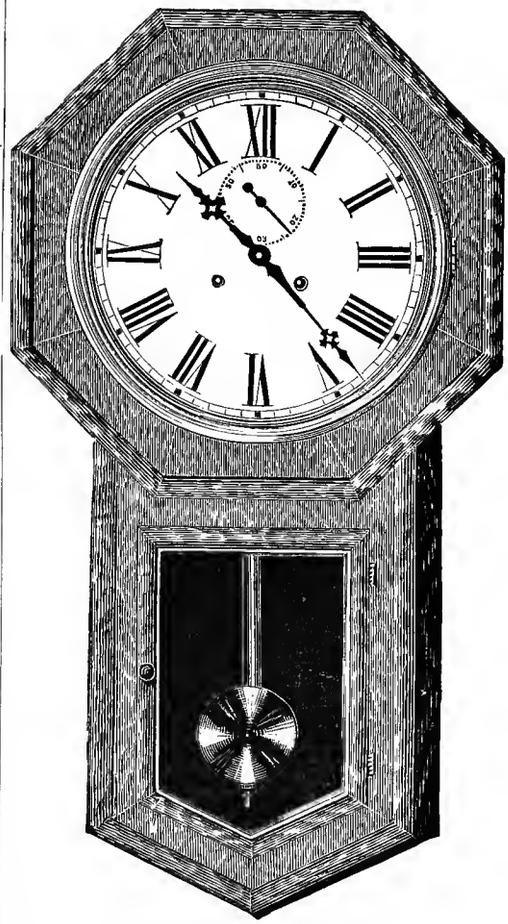

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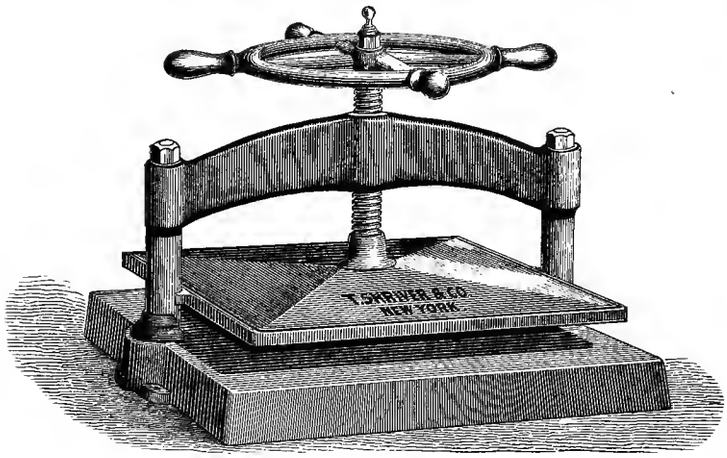

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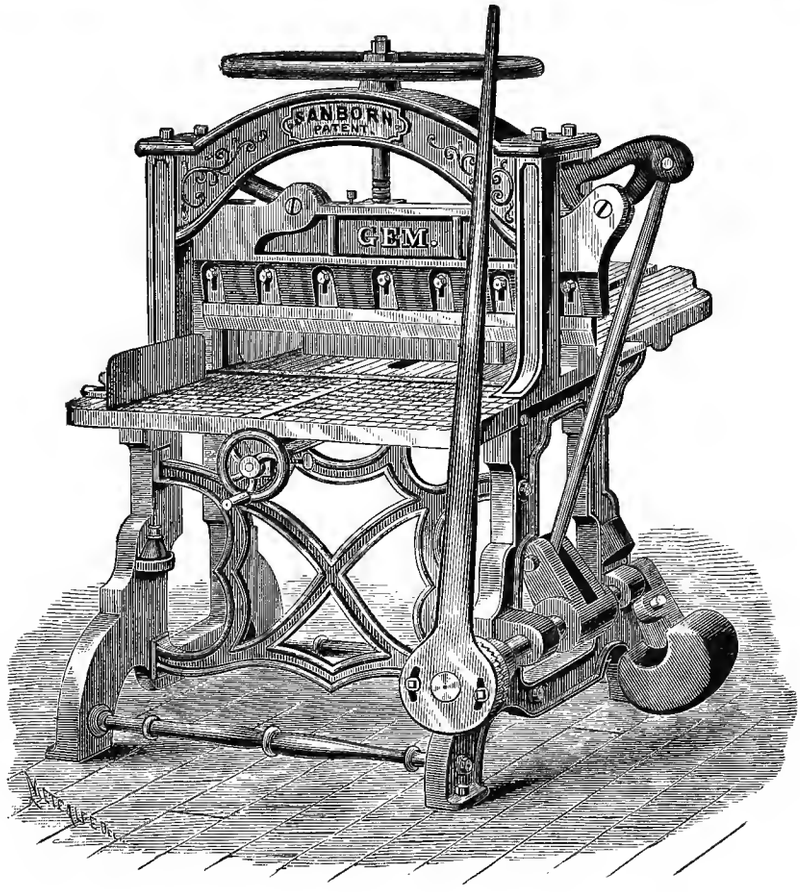
GEO. H. SANBORN & SONS,

THE "GEM" PAPER CUTTER.



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Bookbinders', Printers', and Paper Box Makers' Machinery.

OVER 3,000 SANBORN CUTTING MACHINES IN USE.

Our list of Machinery is by far the fullest and most complete of any concern in the world, embracing over one hundred and fifty (**150**) Machines, among which are

Cutting Machines.....Twelve (12) Sizes and Styles.
Shears and Card Cutters...Twelve (12) Sizes and Styles.
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Trimming, Knife Grinding, Stabbing, Sawing, Beveling, Book Rolling and Scoring Machines, Round and Square Corner Cutters, Circular Pasteboard Cutters, Ruling, Paging and Numbering and Perforating Machines, Gilding Presses, etc., etc., also everything necessary for a complete Bindery.

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1878

AWARDS.

SILVER MEDAL, 1865, - American Institute, N. Y.
DIPLOMA, - - - 1867, American Institute, N. Y.
For BEST on Exhibition.

CERTIFICATE OF AWARD, 1868, Grand State Fair of Louisiana.
For BEST on Exhibition,

ONLY CENTENNIAL AWARD, 1876, For Saddle and Harness Tools.

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MEDAL, - 1878, - Paris Exposition,
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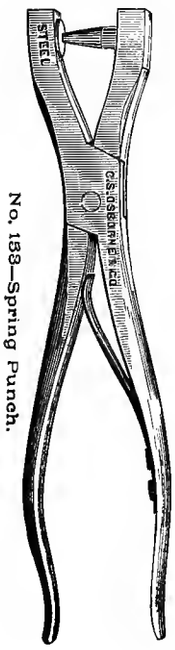
SADDLE AND HARNESS

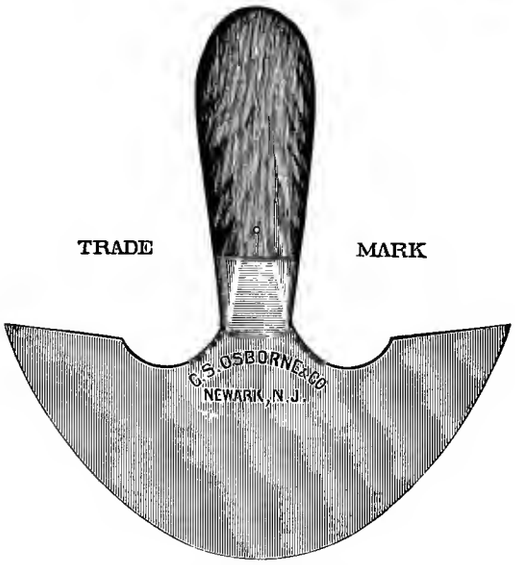
TOOLS



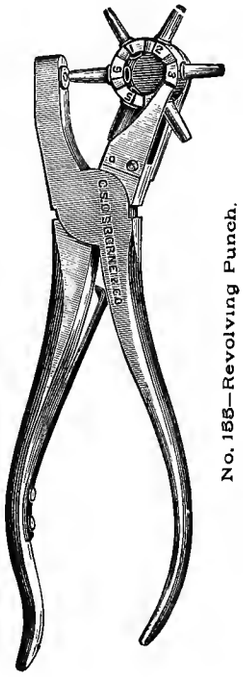
No. 133—Spring Punch.

500 DIFFERENT TOOLS.

TRADE MARK



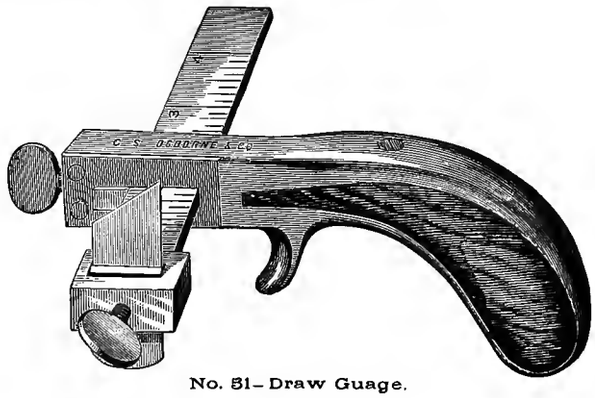
CATALOGUES FURNISHED ON APPLICATION.



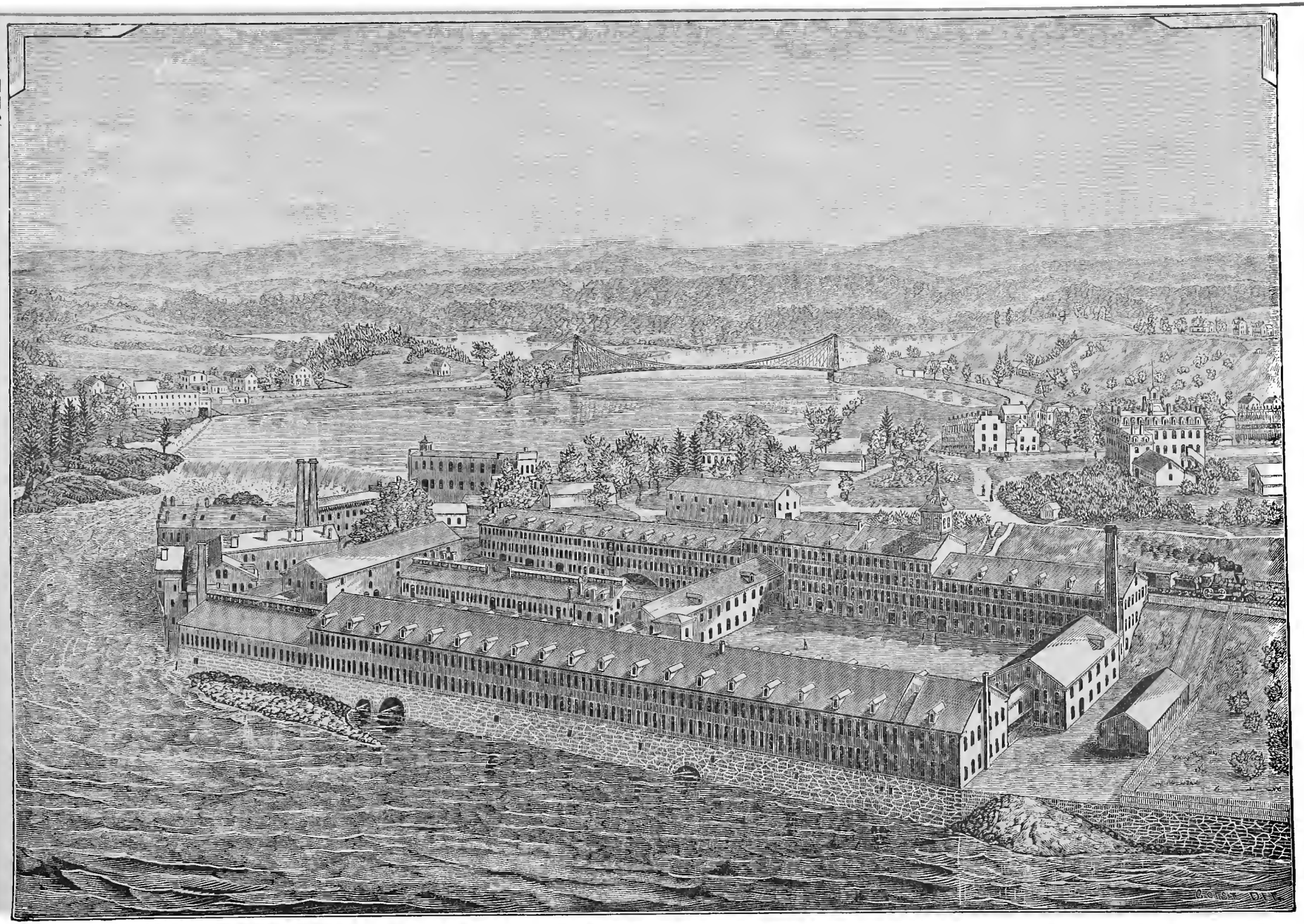
No. 188—Revolving Punch.

96 Mechanic Street, Newark, N. J., U. S. A.

No. 86—Splitting Knife.



No. 51—Draw Guage.



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Trade Mark. { J. RUSSELL & CO., Green River Works.

JOHN RUSSELL CUTLERY CO.

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PICKS, MATTOCKS, WRENCHES.

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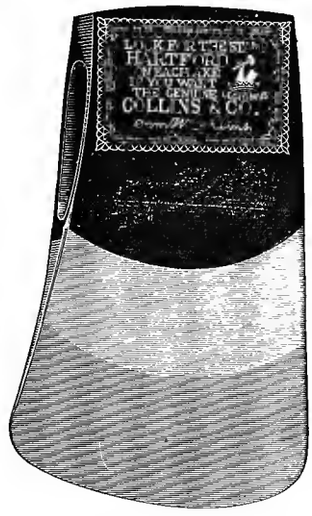

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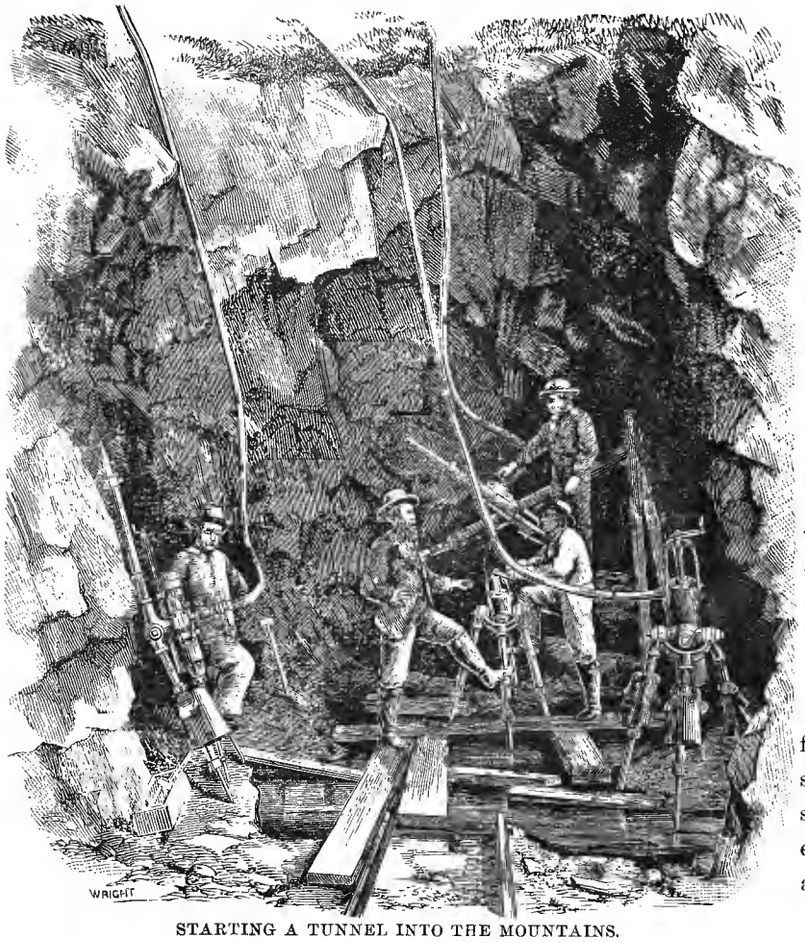
Compressed air is used to run drills underground.

Compressors run by steam or water power.



STARTING A TUNNEL INTO THE MOUNTAINS.

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IMPROVEMENTS.

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Drill Machines of the Same size fit any style of Mounting, and parts are Interchangeable.

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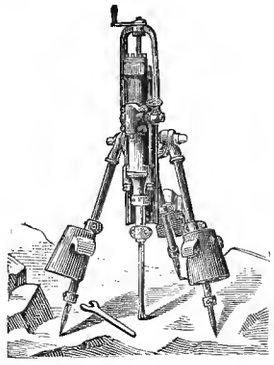
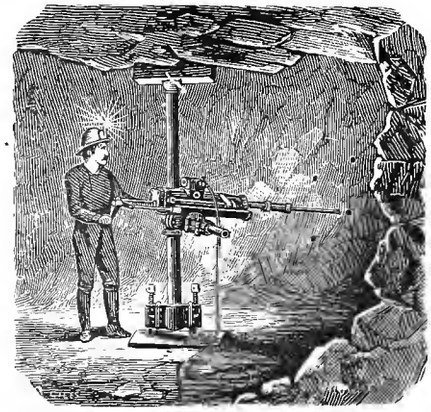


DRILL MOUNTED ON TRIPOD FOR SURFACE WORK.



TUNNELING AND DRIFTING, GOV'T WORKS, HELL GATE, E. R.

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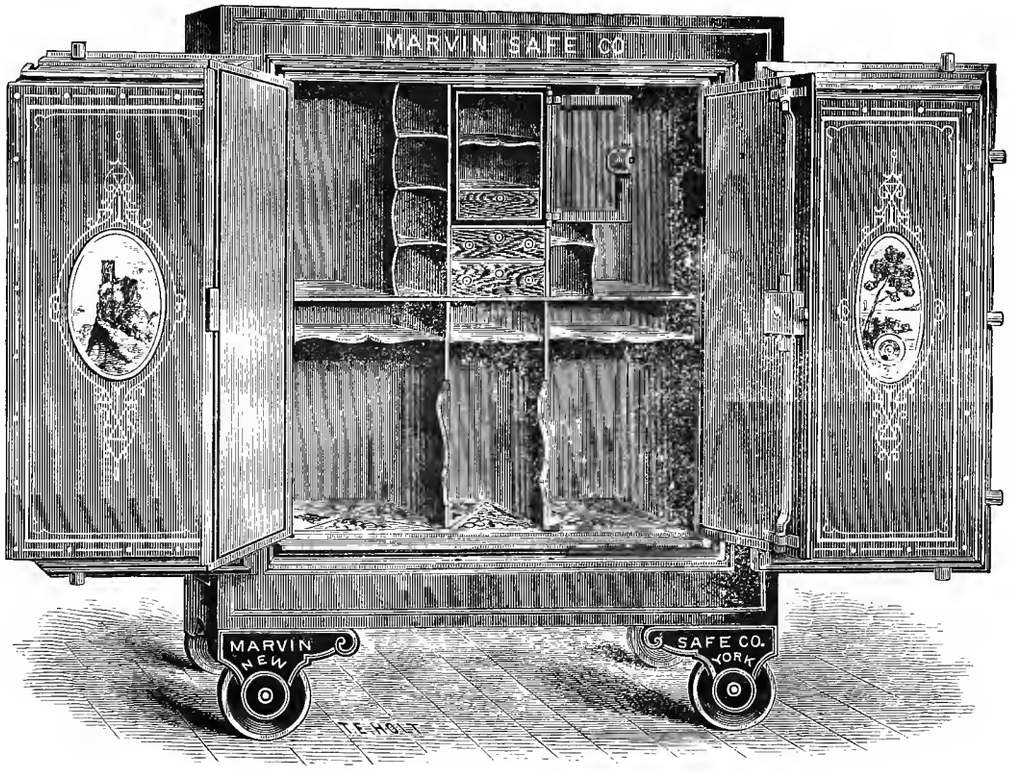
U. S. A.



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FIRE AND BURGLAR PROOF SAFES.
FILLED SAFES FOR EXPORT,
SECTIONAL SAFES (made in six pieces).
PLATE IRON SAFES FOR SPECIE.
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BURGLAR PROOF BANK SAFES AND VAULTS.

Hotel Safes, Jewelers' Safes, House Safes, Safe Cabinets, Portable Safety Boxes.

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MARVIN SAFE COMPANY.

SPRING BALANCES

A SPECIALTY.

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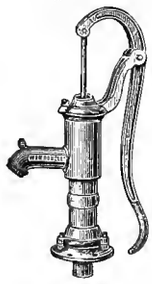
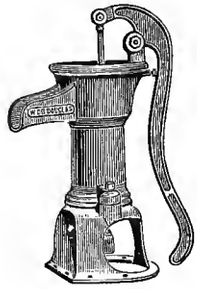
CISTERN PUMP.
Fig. 70.



AQUARIUS.
Fig. 80.

AQUAPULT.
Fig. 259.

PITCHER PUMP.
Fig. 120.

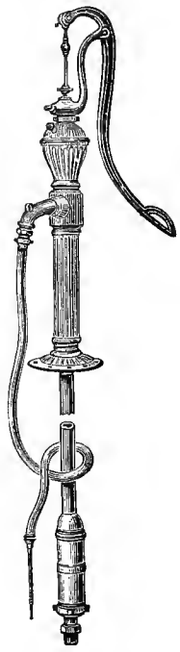


W. & B. DOUGLAS,

MIDDLETOWN, CONN.

YARD PUMP.
Fig. 211.

ENGINE YARD PUMP.
Fig. 123.



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HAND AND POWER PUMPS,
HYDRAULIC RAMS,
GARDEN ENGINES,
YARD HYDRANTS,
STREET WASHERS,
GALVANIZED PUMP CHAIN, ETC.

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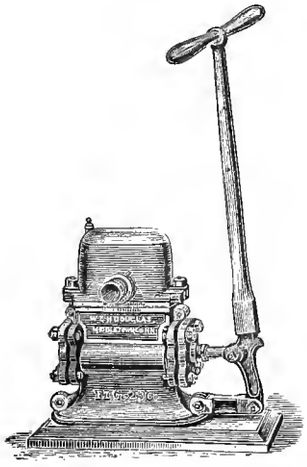
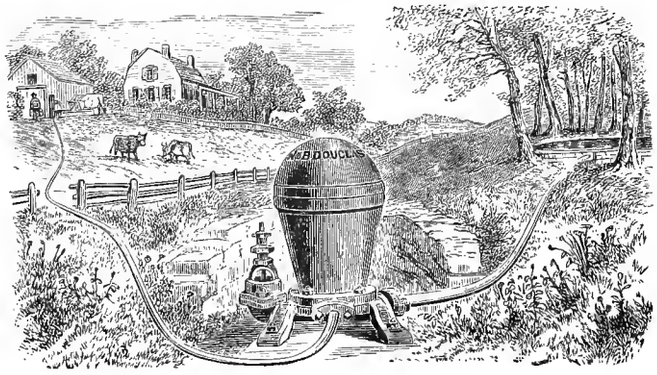
***WORKS FOUNDED* 1832.**

HORIZONTAL FORCE PUMP.
Fig. 236.

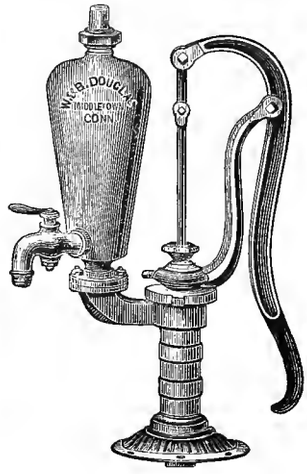


HYDRAULIC RAM, (in Operation.)
Fig. 89.



For Full directions as to capacity, and instructions as to setting the same, see Special Circulars.

HOUSE FORCE PUMP.
Fig. 157.



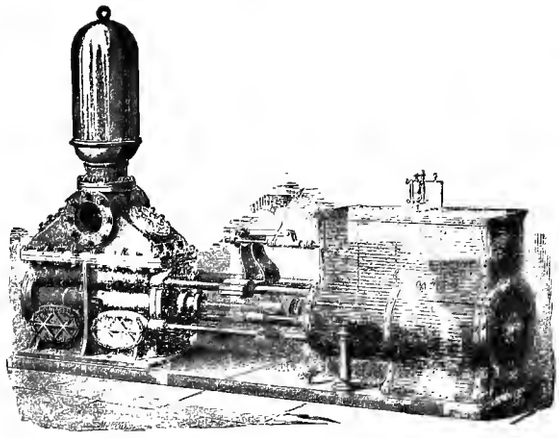
BLAKE'S PATENT STEAM PUMPS.

MORE THAN 13,000

IN USE.

Simple, Positive, Compact and Durable.

Adapted to Every Situation.



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Water Works Pumping Engines of Every Variety.

CONDENSING OR NON-CONDENSING, SINGLE OR DUPLEX.

Send for New Illustrated Catalogue.

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THE STANDARD.

PUMPING ENGINES

For Cities and Towns.

High pressure, or compound and condensing. Highest duty, with simplest mechanism and least cost.

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Horizontal or Vertical.

Made with removable water cylinders or double plungers.

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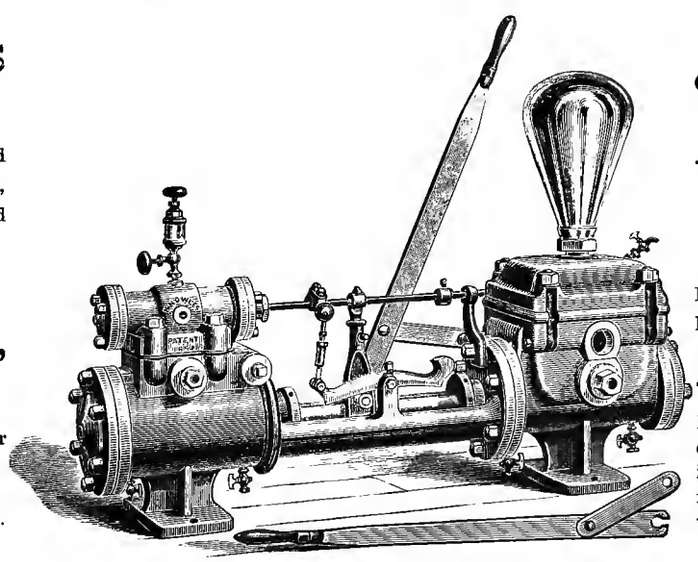

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Of Greatest Efficiency, Durability and Power.

VACUUM PUMPS,

For Vacuum Pans.

Working wet or dry vacuum. Independent or combined. Superior to all others.

Air Pumps and Condensers,

For converting non-condensing engines into condensing engines, increasing the power and saving from 25 to 30 per cent. of the fuel, with small expense.

Every Variety of Steam Pumping Machinery Furnished Under Guarantees.

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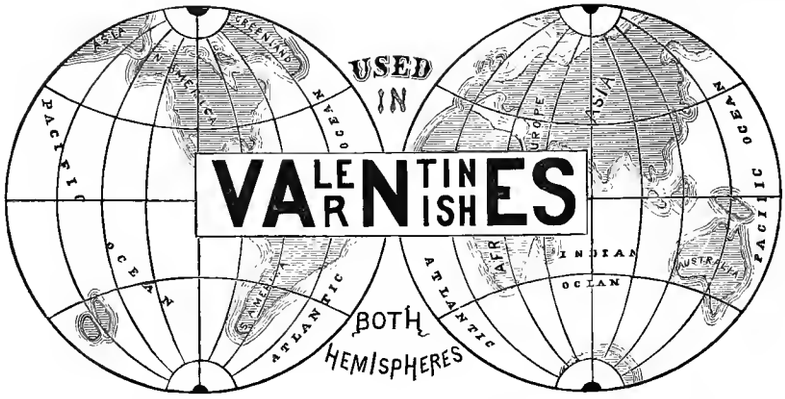
ESTABLISHED 1832. INCORPORATED JANUARY, 1882.



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COACH AND CAR VARNISHES.

The universality of their DEMAND and USE is evidenced by the MANY depots established for their sale, and rendered necessary by the world-wide recognition of their merits.

DEPOTS ARE NOW ESTABLISHED IN

ENGLAND,	SPAIN,	ITALY,	RUSSIA,
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GERMANY,	MEXICO,	AUSTRALIA,	NEW ZEALAND,
HOLLAND,	CUBA,	SCOTLAND,	SOUTH AMERICA.

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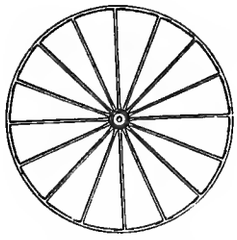
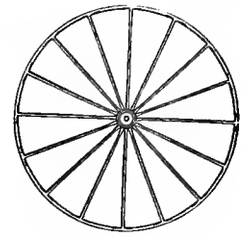


GOLD
MEDAL
AND
DIPLOMA.

PARIS,
1878.

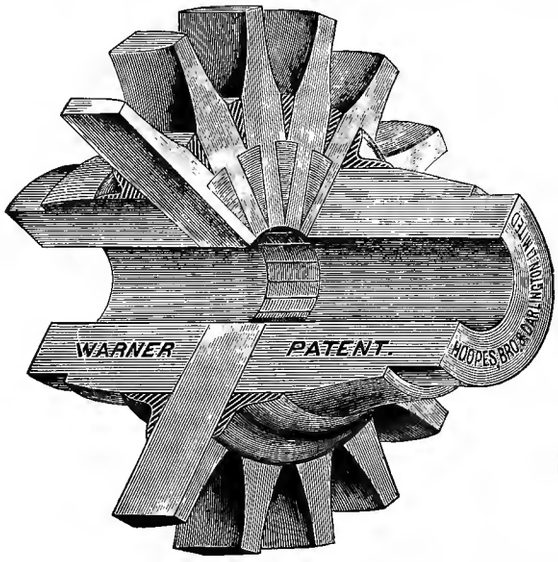


HOOPES, BRO. & DARLINGTON, LIMITED.

West-Chester, Penna., U. S. A.

MANUFACTURERS OF

Hickory and Oak Carriage and Wagon Wheels,

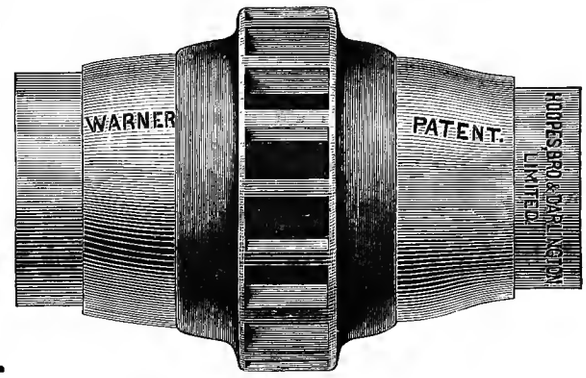


SPOKES,

HUBS,

RIMS,

SHAFTS.



The above cuts represent the **CELEBRATED WARNER PATENT WHEELS**, as manufactured by us. They are the ONLY WHEELS having *Spokes driven through Mortises* in solid metal flanges, *into mortises* in the Wooden Hubs. They are stronger and more durable than any other wheels in the market, and WE WARRANT THEM NEVER TO FAIL AT THE HUB.

We also manufacture *Wooden Hub Wheels of the best quality*, and make a specialty of EXPORT ORDERS. Our large foreign trade enables us to secure the *lowest rates of freight*, and to pack goods in the smallest possible space. *Catalogues and Price Lists Furnished upon application.*

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HIGHEST AWARD.

PHILADELPHIA,
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MEDAL
AND
DIPLOMA.

VIENNA,
1873.
MEDAL
AND
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MANUFACTURERS OF

Shovels, Spades, Scoops and Drainage Tools,

AS FOLLOWS:

PATENT WELDED CRUCIBLE CAST STEEL.

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CRUCIBLE CAST STEEL BACK STRAP.

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The following are the Registered Trade Marks used on our goods:

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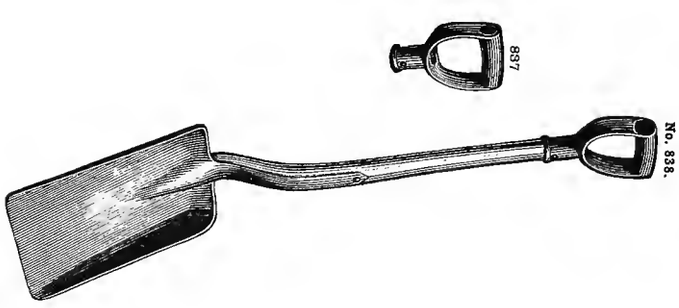


The attention of Railroad Companies and the Trade generally is invited to the improved

TAMPING SHOVEL,

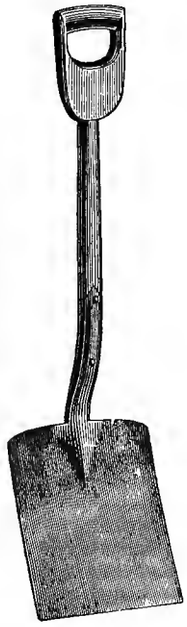
—WITH—

Bolton & Johnson's Patent Malleable Iron Head,

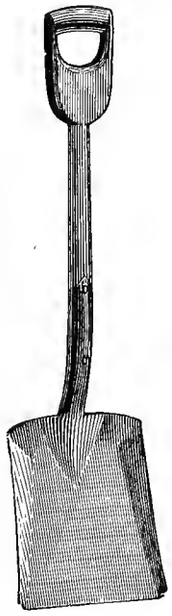
OF WHICH WE ARE THE SOLE MANUFACTURERS.

365.—D Handle Cast Steel Round Point Back Strap Shovel.

365.—Back Strap Round-Point Shovel with Patent Handle.

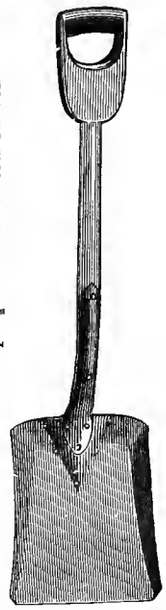


343.—Patent Moulders' Shovel.



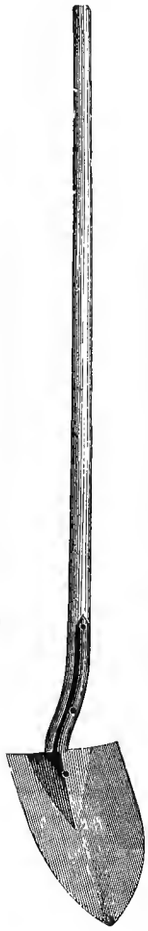
228.—Patent Plain Back Shovel.

22.—Plain Back Square-Point Shovel.

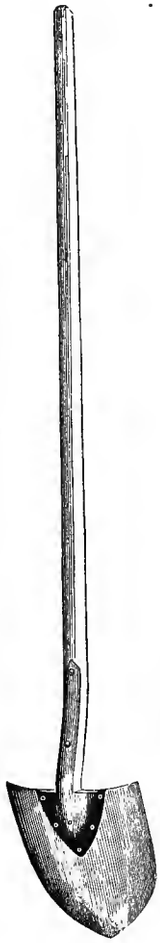


357.—Back Strap D Handle Cast Steel Shovel.

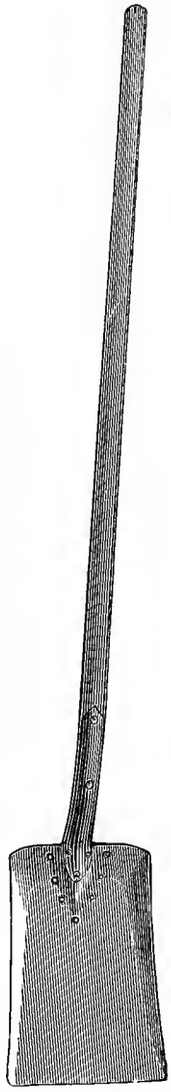
81.—Long Handle Plain Back Spade.



53.—Long Handle Plain Back Round-Point Shovel.



374.—Long Handle Back-Strap Round-Point Shovel.



825.—Gas Shovel. Size 15 1-2 x 9 x 10.

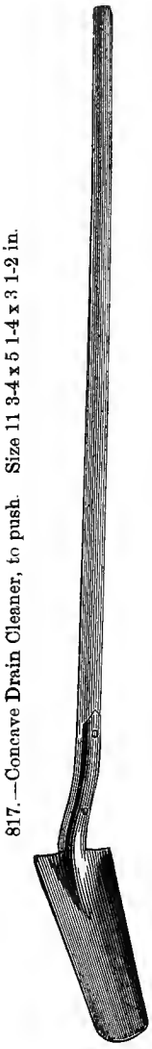
379.—Cast-Steel Back-Strap Spade.

92.—Drain Spade No. 3, with Foot Clasps. Size 17 x 4 1-2 x 3 in.

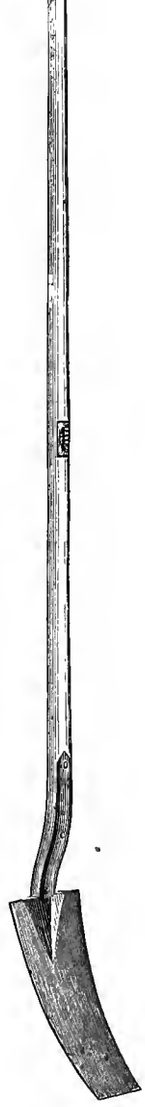
91.—Drain Spade No. 2. Size 17 x 5 1-2 x 4 1-2 in.

90.—Drain Spade No. 2. Size 14 x 7 1-2 x 5 1-2 in.

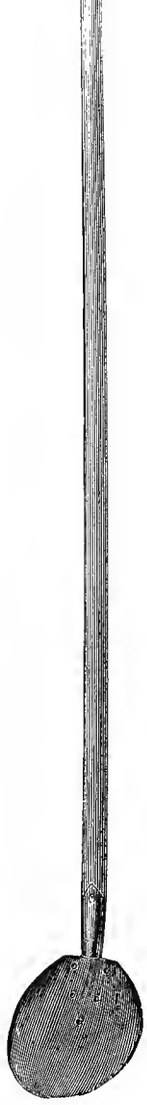
[OVER.]



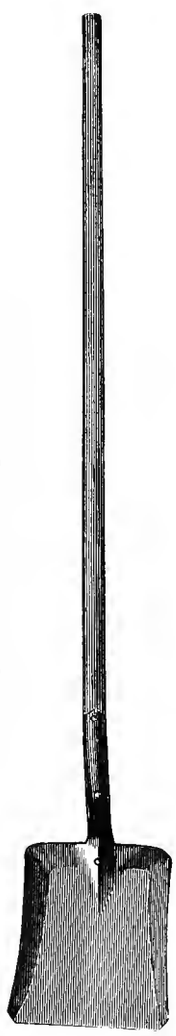
817.—Concave Drain Cleaner, to push. Size 11 3-4 x 5 1-4 x 3 1-2 in.



818.—Flat Drain Cleaner, to push. Size 11 3-4 x 6 1-2 x 5 1-8 in.



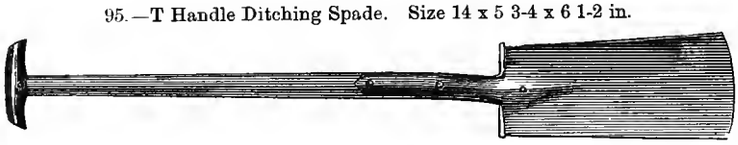
823.—Spoon for digging out Post-holes. Size 10 x 8 1-4 in. Length of Handle 7 ft.



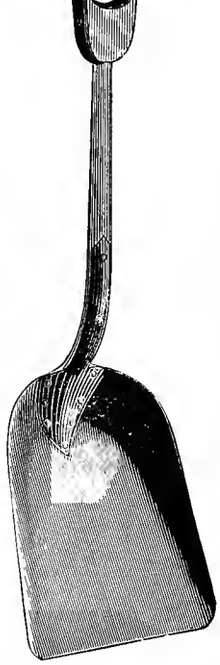
47.—Long Handle Plain Back Square-Point Shovel.

39.—D Handle Plain Back Round-Point Shovel.

94.—D Handle Ditching Spade. Size 14 x 5 3-4 x 6 1-2 in



95.—T Handle Ditching Spade. Size 14 x 5 3-4 x 6 1-2 in.



Front View Scoop. No. 8.

Back View Scoop. No. 2.

586.—Toy Shovel.

592,—Toy Spade.

107.—Hedge Spade. Size 13 x 6 1-8 x 6 1-2 in.

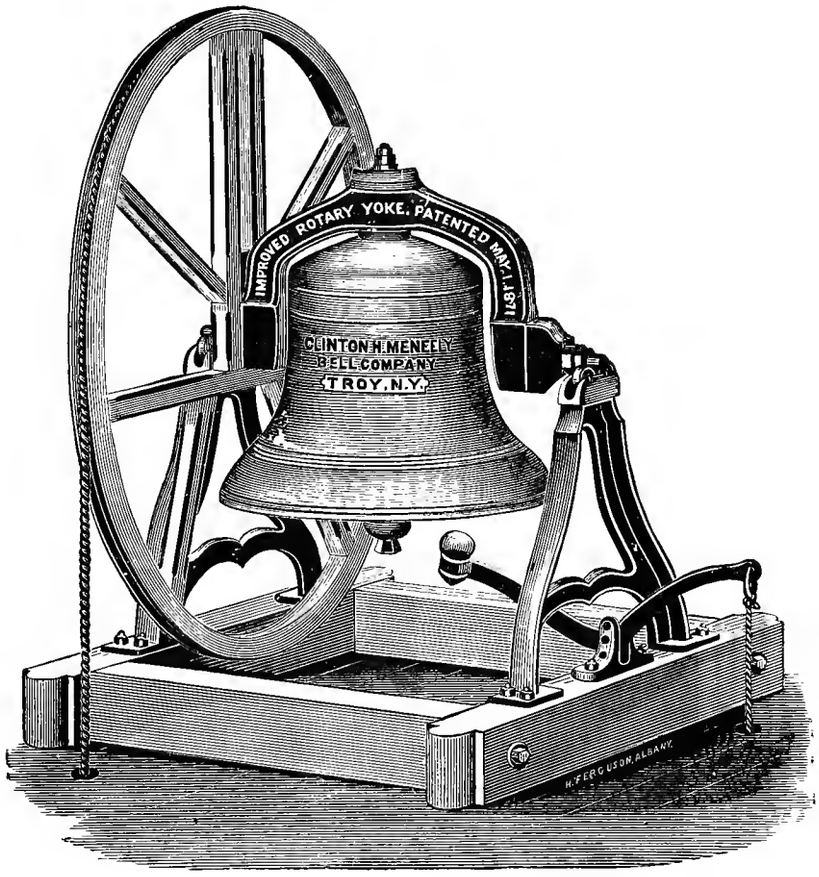
100.—Concave or Post Spade. Size 15 x 5 1-2 x 6 in.

84.—Grafting Spade. Size 13 x 7 x 7 3-4 in.

CLINTON H. MENEELY BELL COMPANY.

(SUCCESSOR TO MENEELY & KIMBERLY.)

TROY, N. Y.



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SPECIAL ATTENTION GIVEN TO

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ILLUSTRATED CATALOGUE SENT FREE TO PARTIES DESIRING BELLS.

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White Lustral Wire Casters,

ARE STRONG, ELASTIC, BEAUTIFUL AND DURABLE.

MANUFACTURED BY

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(NEW YORK CITY BRANCH, 176 FULTON STREET.)

Catalogues, illustrating these Casters and a great variety of other Household Goods, made of White Lustral Wire, furnished upon application.

SHERWOOD'S

SHERWOOD'S

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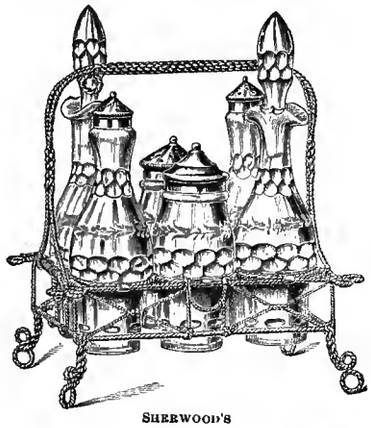

SHERWOOD'S

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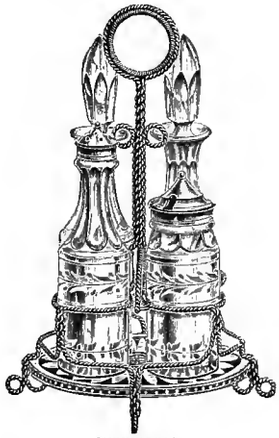
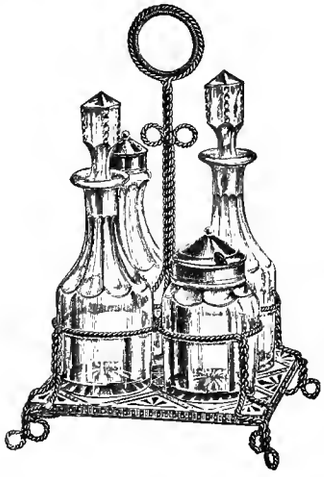
SHERWOOD'S



SHERWOOD'S



SHERWOOD'S

SHERWOOD'S

METROPOLITAN

MANUFACTURING COMPANY,

32 CORTLANDT STREET, NEW YORK,

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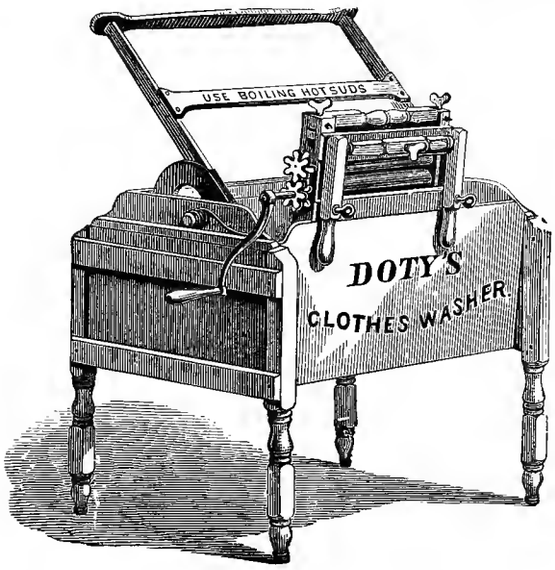
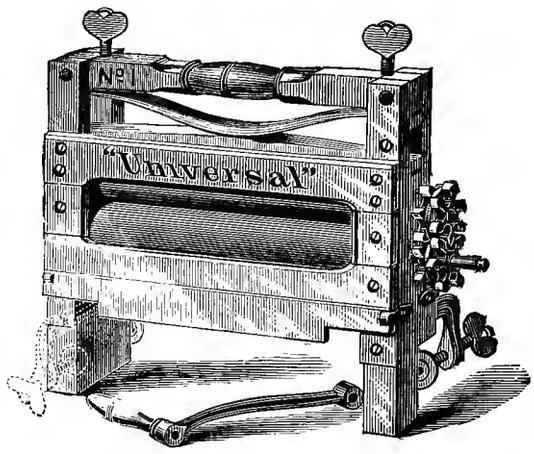
The Universal Wringer,

—AND—

DOTY'S CLOTHES WASHER.





Over ONE MILLION of the UNIVERSAL WRINGER and nearly 100,000 of the DOTY WASHING MACHINE are now in use in the United States, and giving entire satisfaction. They are *warranted durable.*

SIZES AND PRICES.

UNIVERSAL WRINGER.

No. 2½, Medium Size, per doz	$48 00
No. 2, Usual Family Size, per doz	50 40
No. 1½, Large Family Size, per doz	56 80
No. 1, Large Laundry Size, per doz	74 40
No. 8, Large Hotel Size, [each]	9 60

DOTY'S WASHING MACHINES.

Family Size, each	$9 00
Hotel Size, each	10 00

SPECIAL RATES TO JOBBERS AND FOR LARGE QUANTITIES.

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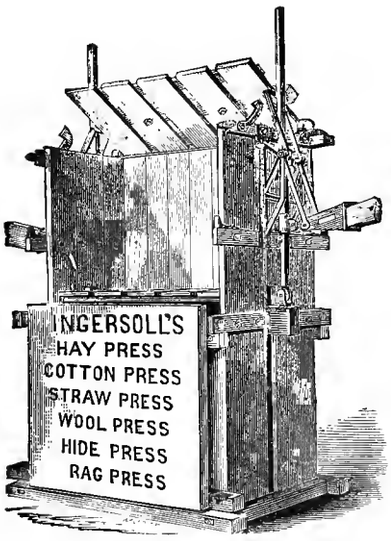
IMPROVED HAND POWER PRESSES,

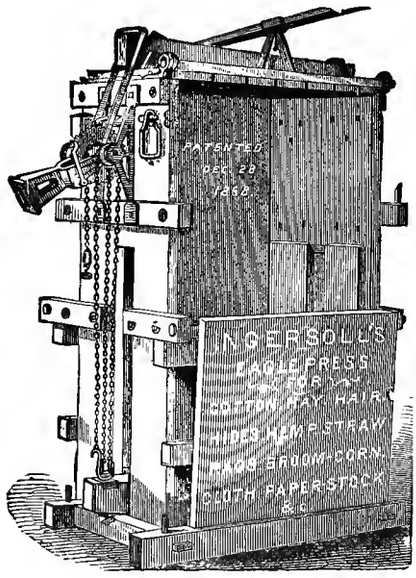
FOR WAREHOUSE, FARM AND PLANTATION USE.

"BAR."



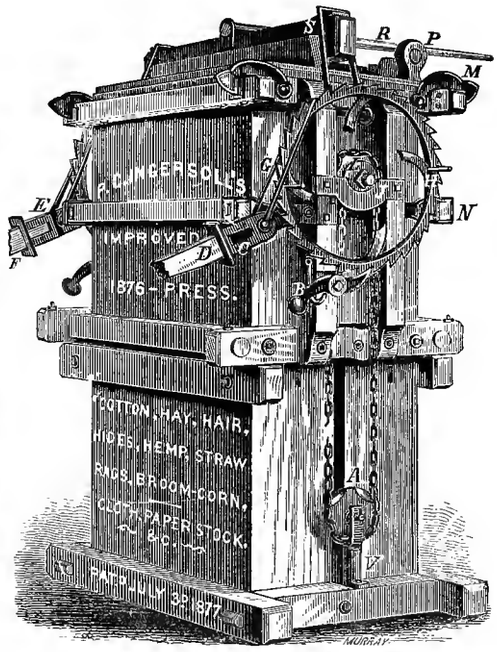
Patented April 15th, 1856

"EAGLE."



Patented December 28th, 1862.

"1876."



Patented July 3d, 1877.

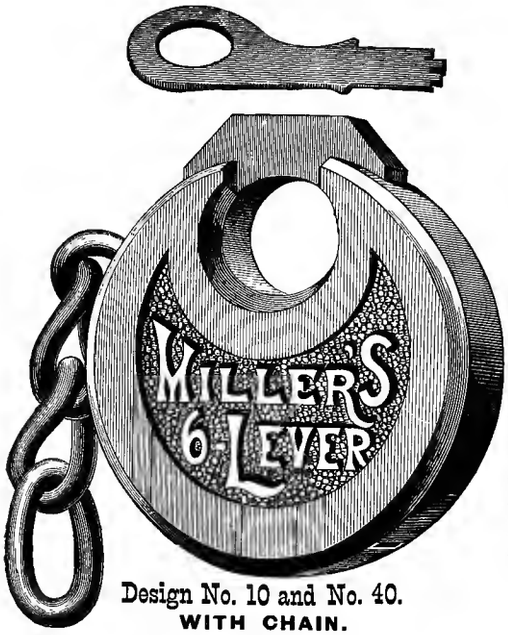
DESCRIPTIVE PRICE LIST.

Parties ordering Press will please state what kind they want, "Bar," "Eagle," or "1876." The prices are the same for each.		PRICE.	Depth of Boxes to be Filled.	Length and width of Bale in inches.	
No. 1 Rag.....	Used also for Moss, Hides, Hemp, Bagassa, Rubber, &c.....	$145	5 feet.	48 long, 24 wide. Weight of Press 1400 lbs.	Will hold of Rags.....500 lbs. Of Moss about.....250 " Rubber, when put in wooden cases, is set on the platen of the press, and can be packed in the boxes tight.
No. 2 Rag.....	Used also for Hides, Wool, Cotton, Flax, Waste Paper, Husks, &c.....	$200	6 feet.	54 long, 24 to 27 wide. Weight 1800 lbs.	Will hold of Rags.....700 to 750 lbs. Of Wool.....500 " Of Hair.....600 to 700 " Of Cotton.....400 to 425 "
No. 1 Cotton....	Used also for Hemp, Spanish Grass, Cotton, Cotton Waste, Husks, &c.....	$170	5 feet.	36 to 50 long 18 to 24 wide. 1300 lbs.	Will hold of Cotton..... 300 lbs. We make it also of suitable size, when so ordered, for bales of.....250, 200, 150 and 125 lbs.
No. 2 Cotton....	Used also for Wool, Hides, Hair, Paper Stock, &c.....	$225	6 feet.	60 long, 24 wide. Weight 1800 lbs.	Will hold of Cotton.....400 lbs. Of Wool.....500 to 600 " Horse or Cattle Hair.....800 or 900 "
No. 3 Cotton....	This is a large and strong Press, and used for making heavier bales than No. 2.....	$250	7 feet.	60 long, 27 wide, Weight 2200 lbs.	Will hold of Cotton.....500 lbs. Of Wool.....700 to 800 " It has no equal as a cheap Cotton Press.
Hide Press.....	FOR PACKING HIDES FULL SIZE. With three-fold 9-16 Chain..... With four-fold 9-16 Chain.....	$275 $300	4½ feet.	84 long, 43 wide. Weight 2600 lbs.	Fifty Hides can be put in, but thirty is about the usual number, making.....1000 to 1300 lbs.
No. 1 Hay and Straw.....	For general farm use, the "Bar" Press or the "Eagle," with two-fold 9-16 Chain.....	$100	5 feet.	46 long, 25 wide. Weight 1100 lbs.	Will hold of fine Hay.....175 to 200 lbs. If coarse and dry.....140 to 150 " Two men can pack about four tons per day.
No. 2 Hay and Straw.....	With three-fold 9-16 Chain—"Diff" or "Bar." Also made 46 long and 25 wide and 6½ feet depth of box, for stowing best on cars..... Two men can pack about 4 tons per day.	$150	6 feet.	50 long, 27 wide, Weight 1300 lbs.	Will hold of fine Hay.....275 to 300 lbs. If coarse and dry, about.....240 to 250 " A large number of these are used for Shucks and Salt Hay.
No. 3 Hay.....	With four-fold 9-16 Chain..... Two men can pack about 4 tons per day.	$200	7 feet.	46 long, 27 wide. Weight 1600 lbs.	Will hold of fine Hay..... 300 lbs. If coarse and dry.....250 to 275 "

JAMES N. BALSTON & SON,

85 & 87 QUAY STREET,

Greenpoint, L. I., N. Y.



Design No. 10 and No. 40.
WITH CHAIN.

SECURITY!
DURABILITY!
CONVENIENCE!

The following are some of the parties now using these locks:

Post Office Department, United States.
Treasury Department, United States.
Post Office Department, Canada.
American Express Co.
Adam's Express Co.
Southern Express Co.
Lake Shore and Michigan Southern R. R.
Baltimore and Ohio Express Co.
Metropolitan Elevated R. R.
New York Elevated R. R.

SPECIAL LOCKS FOR RAILWAYS,

MANUFACTURED TO ORDER.

Brass SWITCH LOCKS, with tinned iron chain, as shown in cut; keys of steel, flat, *reversible or not*, as may be required; six tumblers; springs of the celebrated Phosphate-Bronze.

No. 555, Price, with one key per lock, per doz., $12.50
No 333, " if key is made reversible, " 14.00

By far the most durable and convenient Switch Lock in the market.

Brass Locks for FREIGHT CARS; tinned iron chain attached. These locks pass no switch or other keys than those made specially for the purpose. Secure without seals, but can be sealed with wire and common lead seal if desired.

No. 222 price per doz., $13; one key per lock

☞ *No Company can afford to do without* a secure lock on its local freights.

MASTER (or pass) KEYED *Padlocks for Tool Houses;* the Master Key to be carried by the *Road Master*, giving at any time access to any tool-house or chest anywhere along the company's lines.

This is the only padlock affording this great advantage, whereby any number may be all different as to their keys and yet one *Master Key* will open them all. They have six tumblers, Phosphor-Bronze springs that won't break nor rust out, and combine *security with convenience.*

No. 27, Price per doz., $14.00; 2 keys per lock and 1 Master Key per set.

No. 29, Same with tinned chain, $16.00 per doz.

☞ *The most durable lock is the cheapest.*

Numbering and Stamping or Lettering will be done for a reasonable price when ordered on Locks and Keys.

KEYS REGISTERED FREE OF CHARGE.

☞ *Our capacity for filling orders promptly is probably not surpassed.*

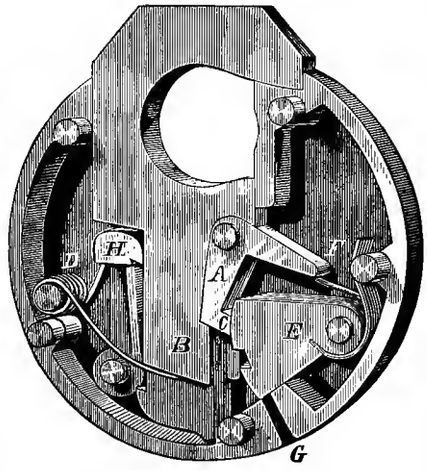
PRICE LIST OF PADLOCKS.

	Per Doz.
No. 1, Lock for general use	$12 00
No. 5, " " " plain finish	12 00
No. 10, " " " with chain	14 00
No. 15, " " " " plain finish	14 00
No. 20, " " " nickel plated	16 00
No. 25, " " " " plain finish	16 00
No. 27, Master Key Locks	14 00
No. 29, " " with chain	16 00
No. 30, Warehouse Locks, extra heavy	18 50
No. 40, " " " with chain	20 00
No. 50, " " " nickel plated	22 00

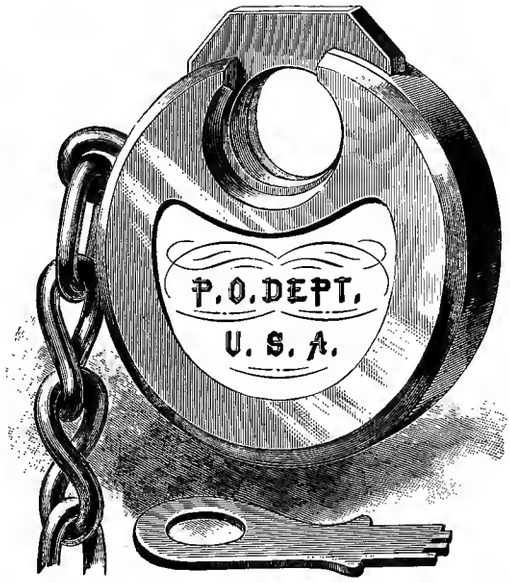
DUPLICATE KEYS.

Single Key	20
Two and less than Twelve ... Each	15
Twelve and less than Fifty ... "	12
Fifty or more ... "	10

DISCOUNT TO THE TRADE:



Interior of the Miller Lock.

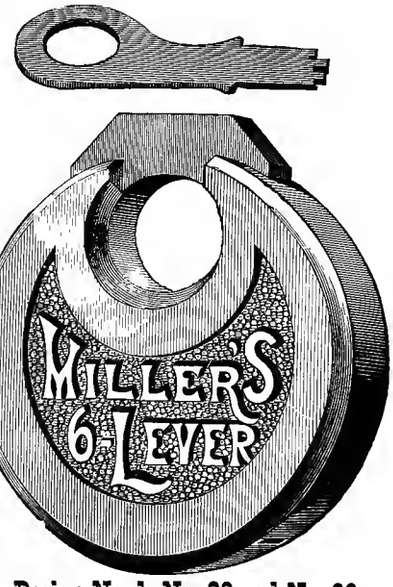


U. S. Mail and District Express Co., N. Y.
Co-operative Mail and Passenger Transportation Co.
Bergner & Engel Brewing Co.
Knickerbocker Ice Co.
Juniata Sand Co.
West Feliciana R. R.
Arkansas Midland R. R.
Pittsburg, Cincinnati and St. Louis R. R.
Elizabeth City and Norfolk R. R.
Cumberland and Pennsylvania R. R.
Cleveland and Marietta R. R.
Philadelphia City Pass. R. R.
Rochester State Line R. R.
Wm. Cramp & Sons, Ship Builders, Philadelphia.
Missouri, Kansas & Texas R. R.
North Philadelphia Drove Yards.

FAIRBANKS & CO.,

No. 311 BROADWAY,

NEW YORK.



Design No. 1, No. 20 and No. 30.

THE HIGGANUM M'F'G CORPORATION,

HIGGANUM, CONN., U. S. A.

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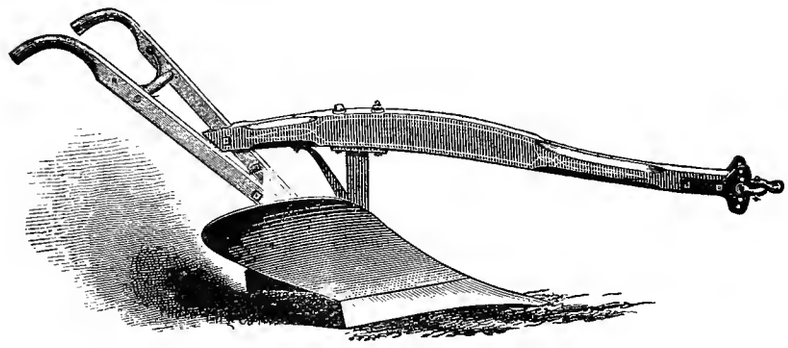
AGRICULTURAL IMPLEMENTS

—FOR THE—

FOREIGN TRADE.



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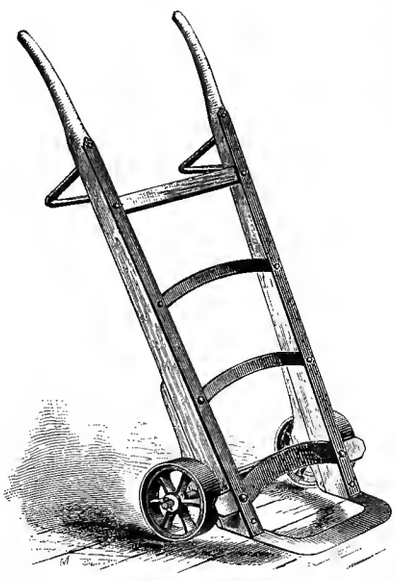
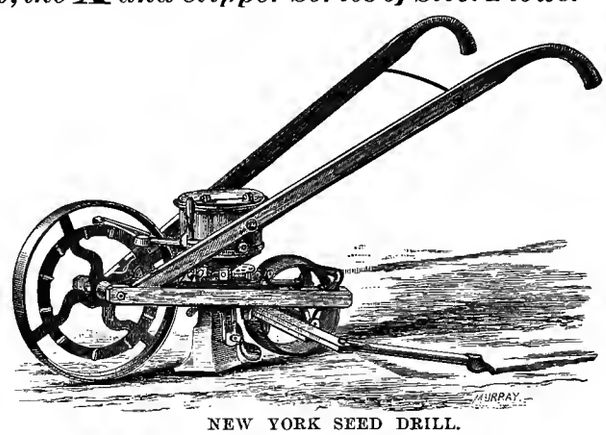
We are the largest manufacturers of General Agricultural Implements in the United States. Our line of plow patterns embraces some five hundred patterns, among which are:

The Genuine Eagle, Nos. 75, 25 and 55 Plows, the Charter Oak Swivel Plow, the X and Clipper Series of Steel Plows.



NEW YORK IMPROVED BARREL TRUCK.



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CORN SHELLERS.

One hundred patterns Corn Shellers, among which are the CONTINENTAL, SILVER EAGLE and SMITHERS.

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The largest line made in this country, embracing two hundred styles and sizes.

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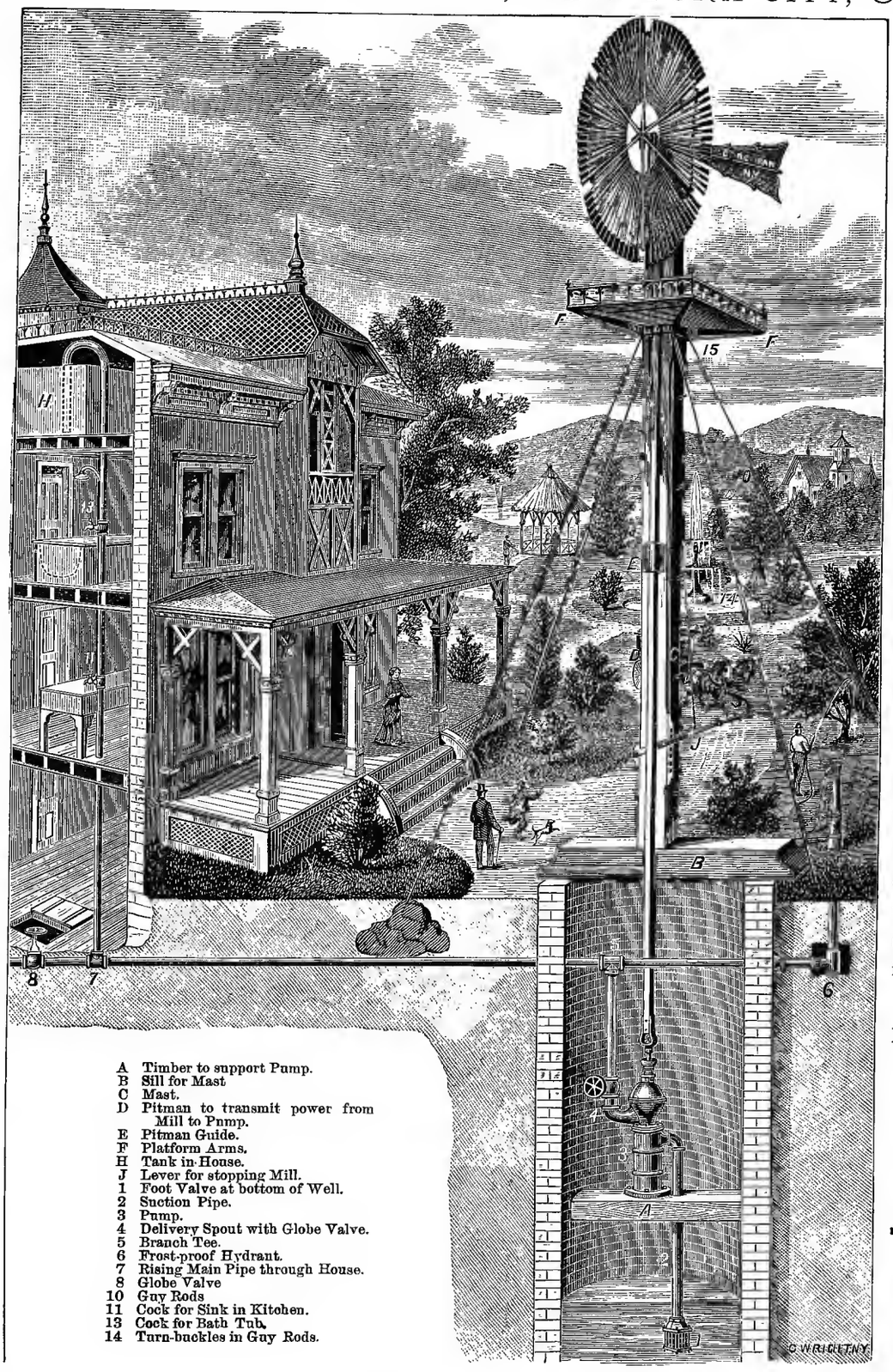
We are sole manufacturers of the celebrated HOLLINGSWORTH MONITOR SELF-DUMP RAKE.

Send for our Illustrated Lists. We quote on all goods, boxed and delivered free on board New York or Boston.

ANDREW J. CORCORAN'S
Storm-Defying, Self-Regulating Wind Mill.
76 JOHN STREET, NEW YORK CITY, U. S. A.



A Timber to support Pump.
B Sill for Mast
C Mast.
D Pitman to transmit power from Mill to Pump.
E Pitman Guide.
F Platform Arms.
H Tank in House.
J Lever for stopping Mill.
1 Foot Valve at bottom of Well.
2 Suction Pipe.
3 Pump.
4 Delivery Spout with Globe Valve.
5 Branch Tee.
6 Frost-proof Hydrant.
7 Rising Main Pipe through House.
8 Globe Valve
10 Guy Rods
11 Cock for Sink in Kitchen.
13 Cock for Bath Tub.
14 Turn-buckles in Guy Rods.

The strongest mill in the world; made principally from wrought and malleable iron. Every one warranted not to be effected by the strongest wind that blows.

25 PER CENT.

MORE POWER

GUARANTEED

than can be obtained from any other wind mill made.

Victorious at

PHILADELPHIA, 1876,

IN PARIS, IN 1878,

AGAIN AT MATANZAS, IN 1881,

in competion with other mills it was awarded the

SILVER MEDAL,

the HIGHEST HONOR in the class to which it belonged.

It has been adopted by engineers in all parts of the world as the most efficient and simple method of raising water.

Making and Shipping for Export a specialty.

Send for Catalogue.

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E. REMINGTON & SONS.

MANUFACTURERS OF

Double and Single Barreled Breech-Loading Shot Guns,

MAGAZINE RIFLE,—KEENE PATENT.

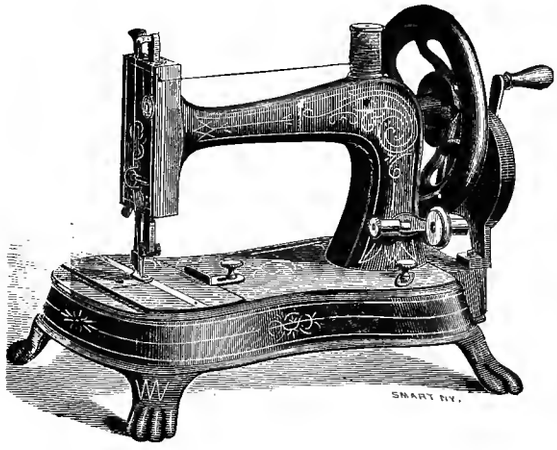
SPORTING, HUNTING, TARGET, GALLERY and PARLOR

Breech-Loading and Repeating Rifles.

ARMY, NAVY, POLICE AND POCKET REVOLVERS,

Cartridges, Bullets, Shells, Primers, Loading Implements, Rifle Canes, &c.

THE "NEW REMINGTON" SEWING MACHINE.

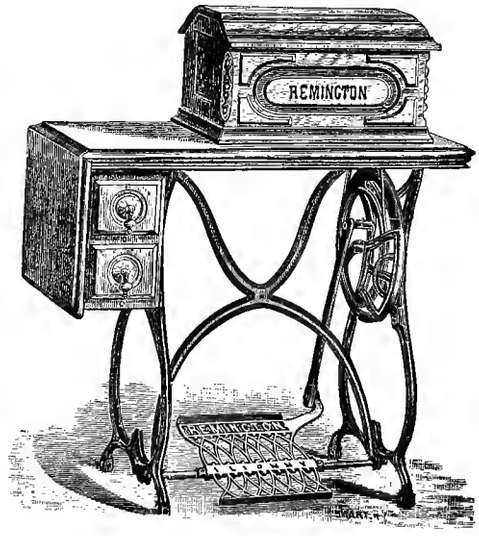


The **latest improved, most complete** and **perfect** machine in the world!

Excels all others in **thoroughness of construction, general workmanship, durability, ease of management,** and **wide range of work** produced.

Unequaled for **speed, capacity, beauty of design** and **elegance of finish.**

DOES ALL KINDS OF WORK.



We give to our Sewing Machines the care and high standard of mechanical excellence that characterize the productions of our Armories, which are well known, at home and abroad, as having no equal in the world.

SPECIAL ATTENTION GIVEN TO ORDERS FOR EXPORT.

GREAT CARE BESTOWED IN PACKING AND SHIPPING.

Nos. 281 & 283 BROADWAY,

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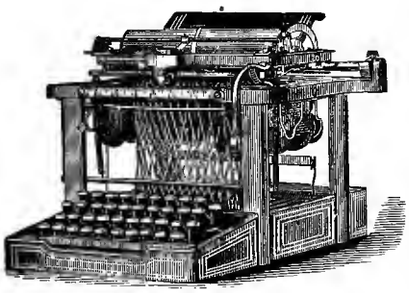
THE IMPROVED WRITING MACHINE.



MACHINE No. 4.—Writes Capitals Only.

MACHINE No. 2.
Writes Capitals and Small Letters.

In use by thousands of business houses and endorsed by all of them.

For business correspondence or other writing it is of the greatest value. It does twice the work of the most expert penman, and in a more beautiful manner. Adapted to write various languages.

Send for circulars with names of prominent patrons and testimonials.

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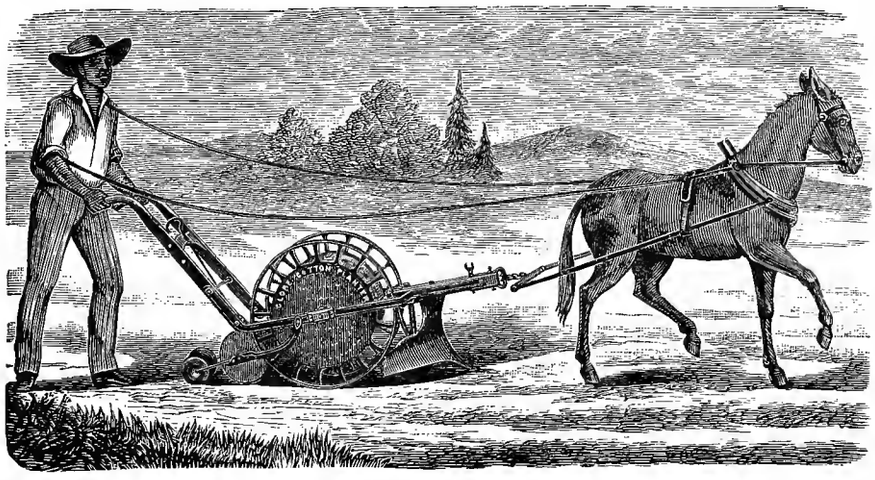
THE GLOBE PLANTER.

BARNA'S PATENT, JUNE 17, 1879.



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A PERFECT COTTON PLANTER.

Already in use in Every State that Plants Cotton.

HIGHEST AWARD AND GOLD MEDAL, ATLANTA EXPOSITION.

WE ALSO MANUFACTURE A GENERAL LINE OF AGRICULTURAL IMPLEMENTS

SEND FOR CIRCULARS.

Something New! A Carbon Plow!

We guarantee every REMINGTON CARBON PLOW wellmade of good material, and, if properly handled, to give perfect satisfaction. Failing in this, after one day's trial, Plow may be held subject to Manufacturer's order.

THE NEW REMINGTON CARBON CLIPPER

IS DESTINED TO TAKE THE PLACE OF THE HEAVY CHILLED AND CAST-IRON PLOWS.

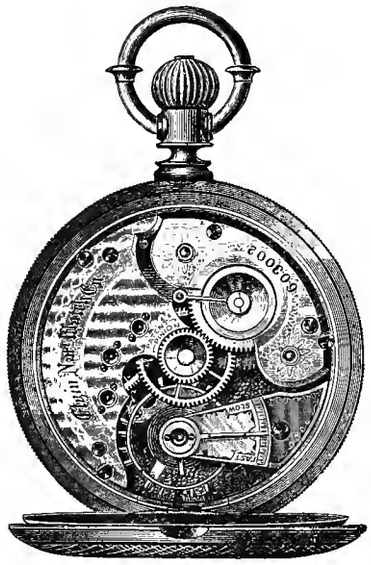
The Carbon Metal, being composed, largely of Cast-Steel, is much lighter and more durable than ordinary Chilled Iron Plows.

Manufactured by THE REMINGTON AGRICULTURAL CO., Ilion, N. Y

Send for Illustrated Price-List.

Branch Offices: 57 Reade Street, N. Y., and 21 So. Howard Street, Baltimore, Md.

NATIONAL WATCH CO.



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STEM AND KEY WINDING WATCHES,

IN 6, 8, 10, 14, 16 AND 18 SIZES.

OFFICE, CHICAGO, ILLS.,

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OFFICE, NEW YORK,

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ESTABLISHED 1824.

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Manufacturers of

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Silver-Plated

GOODS,

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In New and Artistic Designs.

FINE GLASS

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MOUNTED IN

Gold and Silver Plate.

First Premiums awarded for their goods, wherever exhibited, including among many others:

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Centennial Exposition, Philadelphia, 1876.

International Exhibition, Sydney, Australia, 1879.

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VULCANIZED RUBBER FABRICS

ADAPTED TO MECHANICAL PURPOSES.

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Machine Belting,
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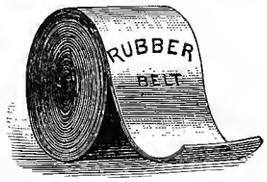
Leading Hose,
Suction Hose,
Grain Elevator Belting,
Steam Hose,
Piston Rod Packing,
Gaskets and Rings.



Vacuum Pump Valves, Ball Valves
Car Springs, Wagon Springs,
Gas Tubing,
Machine Belting,
Wringer Rolls,
Billiard Cushions,
Grain Drill Tubes.
Emery Wheels, Bicycle Tires.

This company manufactured the immense DRIVING and ELEVATOR BELTS for the Buckingham Elevators at Chicago, which have been running perfectly for more than Twelve Years. Also, those for Armour Dole & Co., of Chicago; Vanderbilt's Elevators, for the N. Y. C. & H. R. R. R.; the Great Elevators of the Penna. and Erie R. R., of Jersey City and Hoboken; Dows' Stores, in Brooklyn, and many others. In fact, the LARGEST BELTS, for the Largest Elevators in the World. A Single Carrier Belt in the Penna. R. R. Elevator is over 2,600 feet long, weighing 18,000 pounds, and has run perfectly from the start.

Pat. 6545.

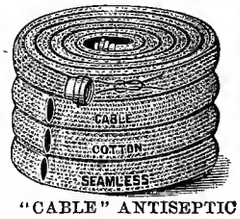
"TEST" HOSE.

LINEN AND COTTON HOSE,

PLAIN AND RUBBER LINED.

Circular Woven-Seamless Antiseptic **Rubber Lined "CABLE" Hose** and **"TEST" Hose**, Vulcanized Para Rubber and Carbolized Duck, for the use of Steam and Hand Fire Engines, Force Pumps, Mills, Factories, Steamers, Ships, Hospitals, &c.

Pat. July, 1873.

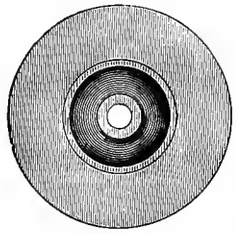


"CABLE" ANTISEPTIC

Car and Wagon Springs.

EMERY WHEELS AND PACKING.

Patented.



EMERY WHEEL.

ORIGINAL

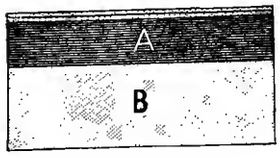
Solid Vulcanite Emery Wheels

Large Wheels Made on Cast Iron Centers if Desired.

The properties of these Wheels are such that they can be used with great advantage and economy for cutting, grinding, and finishing Wrought and Cast Iron, Chilled Iron, Hardened Steel, Slate, Marble, Glass, &c. These Wheels are extensively used by manufacturers of Hardware, Cutlery, Edge Tools, Plows, Safes, Stoves, Fire Arms, Wagon Springs, Axle, Skates, Agricultural Implements, and small machinery of almost every description.

Patented.

Section of Emery Wheel showing Iron Center.



Pat. Jan. 26, 1869.

Patent Elastic Rubber Back Square Packing,

BEST IN THE WORLD.

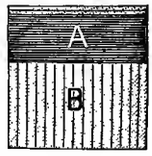
For Packing the Piston Rods of Valve Stems of Steam Engines and Pumps

B represents that part of the Packing which, when in use, is in contact with the Piston Rod.

A the elastic back which keeps the part B against the rod with sufficient pressure to be steam tight, and yet creates but little friction.

This Packing is made in lengths of about 20 feet, and of all sizes from ¼ to 2 inches square.

End view.



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FOR HALLS, FLOORING, STONE AND IRON STAIRWAYS, &c.

This practical and indispensable article—especially for wear where exposed to ice, snow and slush—was first introduced by this company several years ago, and its real value is IN BEING ALMOST INDESTRUCTIBLE, WHEN PROPER MATERIALS ARE USED IN ITS MANUFACTURE, whilst the cheap, inferior quality forced on the public by reckless imitators of our patent goods soon becomes brittle and crumbles to pieces.

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